Project: X-410 Add. Inv. Frmr Oil Rack tart Date **Boring ID LEA Comm No:** 68V7063 05/21/97 Client: Pratt & Whitney East Hartford-JBK **End Date** NK-SB-301 **Location:** P&W East Hartford 05/21/97 Logged By: **Drilling Contractor:** I. Rozovsky Drilling Foreman: Drilling Method: Geoprobe D. Brisson Sampling Method: Drill Rig: Geoprobe 5400 Macro Core **Groundwater Observations:** Surface Elevation: Hours Depth: NR Northing: Hours Easting: Depth: Sample Information Sample Description PIO/FID (ppm) Color, Prim. Grain Size, Sec. Grain Sizes, Elevation/ Depth Sample No. ecover (१) Blows Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive 1634069 Fine to very fine SAND, dry to moist, loose to dense, yellowish brown, greyish to black, Silt in 1.8'-2.8' interval, very fine SAND, reddish brown, some medium Sand, moist, dense 1639070 0 1634071 88 Fine SANd, some Silt around 9', wt, reddish brown, Sand, 0 dense 1634072 0 ?? lenses on the fine SAND, mostly fine, to very fine (~8') Sand, Some Silt, moist, very dense 1634073 100 ٥ Fine SAND with 30% medium Sand ??? brown, moist, dense, hit the Clay layer ≈ at 7.2' Bottom of Boring at 10' Grey Clay 12 16 20 RCRA RECORDS CENTER FACILITY Pratt & Whitney-Main St I.D. NO.CTD990672081 FILE LCC.R-5 OTHER RDMS #2533 Boring No: NK-SB-301

Comments:

Boring backfilled with bentonite

Project: X-410 Add. Inv. Frmr Oil Rack

Start Date

Boring ID 05/22/97 LEA Comm No: 68V7063 Client: Pratt & Whitney East Hartford-JBK **End Date** NK-SB-302 P&W East Hartford 05/22/97 Location: Logged By: 1. Ro Drilling Foreman: LEA I. Rozovsky **Drilling Contractor:** D. Brisson Drilling Method: Geoprobe Drill Rig: Sampling Method: Macro Core Geoprobe 5400 Groundwater Observations: Surface Elevation: Depth: NR Hours Northing: At: Hours Easting: At: Depth: Sample Information Sample Description PID/FID (ppm) Color, Prim. Grain Size, Sec. Grain Sizes, Elevation/ Depth Sample No. (X) Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive 1634076 75 Top layer, dark grey, very fine SAND, some Silt, very dense, dry, sme organic particles on the top, Grey, fine Sand, moist, dense 1634077 1634078 0 Brown reddish, fine SAND, some medium Sand ???, moist, dense 1634079 75 1.0 Fine SAND, yellowish brown, wet to moist, dense, some medium Sand .75 1634080 Fine to medium SAND, yellowish brown, moist, dense, some coarse Sand particles, iron stain lenses (orange to drk brown) 1624081 100 1.0 Fine SAND, reddish brown, wet, dense, some Silt, some iron stain lenses, hit Clay ≈9.5' Bottom of Boring at 10' Grey Clay 12 Printed On: 11/14/1997 16 20 24 Boring Boring backfilled with bentonite Comments:

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Project: X-410 Add. Inv. Frmr Oil Rack Start Date **Boring ID LEA Comm No: 68V7063** 05/22/97 Client: Pratt & Whitney East Hartford **End Date** NK-SB-303 Location: P&W East Hartford 05/22/97 **Drilling Contractor:** LEA Logged By: I. Rozovsky Geoprobe D. Brisson Drilling Method: Drilling Foreman: Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Groundwater Observations: Surface Elevation: Depth: NR At: Hours Northing: At: Hours Depth: **Easting:** Sample Information Sample Description PID/FID (ppm) Color, Prim. Grain Size, Sec. Grain Sizes, Elevation/ Depth Sample No. Blows Moist, Sort, Spher, Angul, Sed Struct, Density, Cohesive ō 1634082 75 0.5 Dark grey to black, very fine SAND, some Silt, dry to moist, very dense, some organic lenses 1634083 Reddish brown, fine SAND, some medium Sand lenses, 1.0 moist, dense 1634084 75 Reddish brown, fine SAND with some medium Sand lenses, 1.0 wet, dense, some organic particles 1634085 1.3 Brown, fine to medium SAND, iron stain lenses, some coarse Sand, moist to wet, dense 1634086 100 Light brown, very fine SAND with some Silt, wet, dense, hit 2.0 the Clay ≈9 Bottom of Boring at 10' DLAY 12 Printed On: 11/14/1997 16 20 Boring No: NK-SB-303 Boring backfilled with bentonite Comments:

Project: X-194 Add. Inv. Former AST Start Date **Boring ID** 68V7062 05/22/97 LEA Comm No: Client: Pratt & Whitney **End Date** NK-SB-304 Location: East Hartford, CT 05/22/97 Logged By: 1. Ro Drilling Foreman: I. Rozovsky **Drilling Contractor:** LEA D. Brisson Drilling Method: Geoprobe Drill Rig: Geoprobe 5400 Sampling Method: Macro Core Surface Elevation: **Groundwater Observations:** Depth: Hours Northing: At: Depth: Hours Easting: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Recovery (%) Blows Moisture, Sorting, Sphericity, Angularity, (pom) Sedimentary Structures, Density, Cohesiveness 1634109 ō 75 Yellowish-brown, very fine SAND, moist, dense, some iron-staining lenses ┙ 1634110 Reddish-brown, fine SAND, some medium Sand, wet, dense, some iron-staining spots Bottom of Boring 4' Printed On: 2/9/1998 16 20 Boring Boring backfilled with bentonite Comments:

X-430 Former Steel Tank Project: **Start Date** Boring ID LEA Comm No: 68V7065 05-27-97 Client: Pratt & Whitney **End Date** NK-SB-305 Location: East Hartford, CT 05-27-97 Drilling Contractor: Drilling Method: Sampling Method: Logged By: I. Rozovsky
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400 LEA Geoprobe MC Surface Elevation: Groundwater Observations: Northing: Depth: NR At: At: Hours Easting: Depth:

	San	nple Informati	OR .	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1634170	75		Very fine SAND, Silty, Dark brown (top) to light brown (≈2'), dry to moist, dense	0
†	1634171			Yellowish brown, fine SAND, moist, very dense, some Silt	0
1 4	1634173 1634172	67		Dark brown, fine SAND, some medium Sand, wet, dense, some iron-stained lenses, black organic lenses; fine to very fine SAND, yellowish-brown ≈ at 7.5', sone Silt (brown)	0
Ī	1634174			layer, wet, dense, some medium Sand Fine to very fine SAND, Yellowish brown ≈ at 7.5', some Silt (brown) layer, wet, dense, some medium Sand	0
+8	1634175	75		8" - 8.7': medium SAND with some coarse Sand, wet, medium dense, 8,7-10- Silty Sand, some black oily sheen on Sand, wet, dense, no smell, ≈ As Above, 10.5', list the grey Clay layer, moist	-
†	1634176			Clay layer, moist	
+12				Bottom of Boring 12'	
†					
16					
† †					
20					
24				· · · · · · · · · · · · · · · · · · ·	
	1				

Project: X-430 Former Steel Tank LEA Comm No: 68V7065 Client: Pratt & Whitney

Hours

Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Sampling Method: Geoprobe MC Groundwater Observations:

Depth: NR At: **Start Date** 05-28-97 **End Date** 05-28-97

Boring ID

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NK-SB-307

I. Rozovsky Logged By: Drilling Foreman: Drill Rig: Geoprobe 5400 Surface Elevation:

Depth:	A	At:	Hours	₹ Easting:	
	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6" .	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1634185	100		Top 8": Topsoil (black, some organic involvements), some medium Sand, fine SAND, moist, dense; Brown fine SAND, some medium Sand, iron-stained lenses, wet, dense	0
+4	1634187 1634188 1634189	58		Reddish brown, fine SAND, some medium Sand, wet, dense, some medium Sand, some black organic lenses, Yellowish-brown, fine to medium SAND, wet, medium density, 4" layer of light brown Silt at 7.5'	0
8	1634190	88		Dark brown-reddish, fine to medium SAND, some coarse Sand, wet, dense, some black, iron-stained lenses, grey Clay layer 11'	0
+12				Bottom of Boring 12'	
-16					
+20					
24	·				

Project: X-430 Fo	rmer Steel	Tank
LEA Comm No: 6	38V7065	
Client: Pratt & Wi		
Location: East Ha	rtford, CT	
Drilling Contractor:	LEA	
Drilling Method:	Geoprobe	
Sampling Method:	MC	
Groundwater Observ	vations:	
Depth: NR	At:	Hot
Depth:	At:	Hour

Hours

Start Date 05-28-97 End Date 05-28-97

Boring ID NK-SB-308

Logged By: I. Rozovsky
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:
Easting:

Depth:		At:	Hours	₹ Kasting:	
	San	npie Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
† 0 † †	1634192	88		Top 6": Topsoil, yellowish-brown, fine SAND, moist, dense, some black organic lenses; Yellow, dark brown to light brown, fine SAND, some medium Sand, moist, dense	0
4	1634194 1634195	75		Reddish-Brown, fine SAND, some medium Sand, wet, dense, black iron-stained lenses, Yellowish to light brown, fine SAND, some medium Gravel, wet, dense, black, iron-stained lenses	0
-8	1634196	67		Reddish-brown, fine SAND to medium Gravel, wet, dense, black, ironstained lenses; grey Clay layer 11.8'	
+	1634197			·	
+12 +				Bottom of Boring 12'	
16			·		
20	-				
24					
Comments	: Boring	backfille	ed with bent	tonite	



Depth:

Project: X-430 Former Steel Tank

LEA Comm No: 68V7065

Client: Pratt & Whitney

Location: East Hartford, CT

Drilling Contractor: LEA

Drilling Method: Geoprobe

Sampling Method: MC

Groundwater Observations:

Depth: NR At: Hours

Hours

At:

Start Date 05-28-97 End Date 05-28-97

Boring ID

NK-SB-309

Logged By: I. Rozovsky
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

Sample No. 1634198 1634199 1634200	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 4": Topsoil, Yellowish-brown, fine SAND with some black organic lenses, moist, dense; Yellowish-brown, fine SAND, some medium Sand, wet, dense, some iron-stained lenses	(ррт
1634198 1634199 1634200	88	Blows /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 4": Topsoil, Yellowish-brown, fine SAND with some black organic lenses, moist, dense; Yellowish-brown, fine SAND, some medium Sand, wet, dense, some iron-stained lenses	(ppm
1634199			organic lenses, moist, dense; Yellowish-brown, fine SAND, some medium Sand, wet, dense, some iron-stained lenses	
	83		Too CON. Considerate for CAND and the Cand	İ
			Top 20": Greenish-grey, fine SAND, trace(+) medium Sand, wet, loose; Next 16": Orange-brown to brown, fine SAND, trace(-) medium Sand, wet, loose; Next 1": Red-brown, very fine SAND, little Silt, wet, dense; Bottom 3": Greenish-grey, fine to medium SAND, trace(-) coarse Sand, wet, loose	
1634202 1634203	75		Dark brown, fine SAND, some medium Sand, wet, dense, iron-stained lenses; grey Clay layer at 11"	
•			Bottom of Boring 12'	
	1634203			iron-stained lenses; grey Clay layer at 11"

LEA

Project: Add. Investigation NK Soil Piles **Start Date Boring ID** 68V7075 LEA Comm No: 06/05/97 Client: Pratt & Whitney **End Date** NK-SB-310 Location: East Hartford, CT 06/05/97 **Drilling Contractor:** B. Tomicic LEA Logged By: **Drilling Method: Direct Push** Drilling Foreman: D. Brisson Sampling Method: Drill Rig: Geoprobe 5400 Macro Core Surface Elevation: Groundwater Observations: Depth: N/R At: Hours Northing: Hours Depth: At: Easting: Sample Description Sample Information Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Blows /6" Sample No. covery Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1634657 88 1.4 Top 6": Organic debris; Middle 10": Light brown, fine SAND, dry, loose, trace(-) medium Sand; Bottom 8": Yellowish brown, fine SAND, trace coal and cinders, dry, 1634658 1634659 0.2 Yellowish brown, fine SAND, trace coal and cinders, moist, loose 1634660 0.2 Top 6": Dark brown, fine SAND, trace medium Sand, wet, loose, coal and cinders; Bottom 6": Greyish brown, fine to medium SAND, wet, loose 2.0 1634661 Greyish brown, medium to fine SAND, wet, loose 1634662 2.0 As Above, CLAY in tip 1634663 2.2 Bottom of Boring at 12' 12 Bottom of Boring at 12' Printed <u>;;</u> 16 2/2/1998 20 24 Boring Borehole backfilled with bentonite chips upon completion Comments: Z



Add. Investigation NK Soil Piles Project: LEA Comm No: 68V7075 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor:
Drilling Method: LEA **Direct Push** Sampling Method: Macro Core **Groundwater Observations:** Hours

Depth: N/R Depth: At: Hours **Start Date** 06/05/97 **End Date** 06/05/97

Boring ID NK-SB-311

Logged By: B. T Drilling Foreman: B. Tomicic D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

Northing: Easting:

	San	nple Informat	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blaus /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ľ	1634664	88		Top 3": Organic debris; Bottom 18": Yellowish brown to fdark yellowish brown, fine SAND, trace fine and coarse Gravel (process stone), dry, loose; 2" layer of light brown, fine to medium SAND at 1.2'	0.2
+	1634665			Dark yellowish brown, fine SAND, trace fine and coarse Gravel (process stone), moist, loose, petroleum odor	6.0
+4	1634666	62		Dark yellowish brown, fine SAND, moist, loose, petroleum odor	7.2
+	1634667			Dark brown, fine SAND, trace(-) fine Gravel, wet, loose; strong petroleum odor	60.2
	1634668	79		Top 6": Dark brown, fine SAND, trace(+) Silt, wet, loose; Bottom 1': Greyish brown, fine to medium SAND, wet, loose	80.0
‡ +	1634669			Top 1.2': Greyish brown, fine to medium SAND, grading to yellowish brown, medium to fine SAND, wet, loose; Bottom 6": Grey, varved CLAY, wet, loose	0.0
12				Bottom of Boring-at 12'	
16					
20					
	} :				
<u> </u>					
+ 24		1 1			1

Boring No: NK-SB-311

Printed On: 2/2/1998

Project: Add. Investigation NK Soil Piles LEA Comm No: 68V7075

Hours

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method: Direct Push** Sampling Method: Macro Core

Groundwater Observations: Depth: N/R At:

Start Date 06/05/97 **End Date** 06/05/97

Boring ID

NK-SB-312

B. Tomicic

Logged By: B. To Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

+	Easting:	Hours	At:	``	Depth:
	Sample Description	ion	aple Informat	Sam	
(ppm)	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	Blows /6"	Recovery (X)	Sample No.	Elevation/ Depth
0.4	8": Dark brown, fine SAND, some Silt, trace organic ter, dry, loose; Bottom 1.2': Light brown, fine SAND, loose		88	1634670	°
0.2	yellowish brown, fine SAND, trace(-) fine Gravel, st, loose			1634671	
0.4	yellowish brown, fine SAND, moist, loose		46	1634672	+4
10.0	yellowish brown, fine SAND, little medium Sand, wet,			1634673	
22.0	brown, fine SAND, trace Silt, wet, loose, petroleum		67	1634674	-8
7.2	vish brown, fine to medium SAND, grading to yellowish vn, medium to fine SAND, trace coarse Sand, wet, e; Bottom 6": Grey, varved CLAY, wet, loose			1634675	‡
	om of Boring at 12'				† 12
		[1 1
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1	!				+16
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					<u>†</u>
					+ 1
					+24
	• .		1 1		+ 1
	<u> </u>			<u> </u>	t
	te chips upon completion	lled with be	ole backfil	: Boreho	Comments
_	te chips upon completion	lled with be	ole backfi	: Boreho	-24 -Comments:

Project: Add. Investigation NK Soil Piles LEA Comm No: 68V7075 Client: Pratt & Whitney Location: East Hartford, CT LEA **Drilling Contractor:** Drilling Method: Direct Sampling Method: Macro Groundwater Observations: **Direct Push Macro Core** Hours 呈 Depth: N/R

Start Date 06/05/97 **End Date** 06/05/97

Boring ID

NK-SB-313

B. Tomicic Logged By: Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: D. Brisson

Depth: N		At:	Hours	Easting:	
	San	pje Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
10	1634676	92		Top 8": Light brown, fine SAND, trace organic matter, dry, loose; Bottom 1.2': Yellowish brown, fine SAND, dry, loose	0.2
‡	1634677	92		Yellowish brown, fine SAND, moist, loose	0.2
+4	1634678	54		As Above	2.0
+	1634679	54		Top 6": As Above; Bottom 1': Dark brown, fine SAND, trace Silt, petroleum odor, wet, loose	90.0
-8	1634680	4		Same as last 1' above; Bottom 2": Black, sapric organic matter	500.0
† †	1634681	4		Greyish brown, fine to medium SAND, trace coarse Sand, wet, loose	22.0
12	1634682	50		Top 8": Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose; Bottom 10": Grey, varved CLAY, wet, loose	4.0
‡				No Recovery; CLAY at 14'	
+16 1				Bottom of Boring at 16'	
 	-				
20					
†					
-24					
Ī					
Comments	: Boreho	le backfi	illed with be	entonite chips upon completion	1

Project: Add. Investigation NK Soil Piles LEA Comm No: 68V7075 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Direct I Sampling Method: Macr Groundwater Observations: Depth: N/R At: **Direct Push** Macro Core

Hours ₹

Start Date 06/05/97 **End Date** 06/05/97

Boring ID NK-SB-314

Logged By: B. Tomicic
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

	ı: t:	Hours	Easting:	
Sam	ple Informat	tion	Sample Description	
ample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
34683	96		Top 8": Light yellowish brown, fine SAND, trace organic matter, micaceous, dry, loose; Bottom 40": Light brown, fine SAND, micaceous, moist, loose	0.0
34684	96		Top 5": Same as last 40", petroleum odor; Middle 4": Dark brown, fine SAND, trace Silt, wet, loose, strong petroleum odor; Bottom 39": Drk yellowish brown, fine SANd, moist,	5.0
34685	50		Nose Dark yellowish brown, fine SAND, Cobble at 5', moist, loose, petroleum odor	6.0
34686	50		Dark brown, fine SAND, moist, loose, strong petroleum odor	4.0
34687	83		Dark brown, fine SAND, trace Silt, wet, loose, wet at 8', slight petrtoleum odor; Bottom 6": Dark brown, fine SAND and black sapric organic matter, wet, loose	70.0
34688	83		Greyish brown, fine to medium SAND, wet, trace(-) coarse Sand, loose	40.0
34689	83		Top 1': Greyish brown, medium SAND, trace(+) coarse Sand, wet, loose; Bottom 8": Grey, varved CLAY, wet, loose	0.4
			Bottom of Boring at 14'	
			•	
			•	
Bor	ehol	ehole backfi	ehole backfilled with be	ehole backfilled with bentonite chips upon completion

Groundwater Observations:

Project: X-430 Area - Former AST LEA Comm No: 68V7074 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core

Start Date 06/06/97 End Date 06/06/97

Boring ID

NK-SB-315

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Depth: Depth:		At: At:	Hours Hours	Northing: Easting:	
	San	nple Informa	tion	Sample Description]
devation/ Jepth	Sample No.	Recovery (%)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1634622	100	·	Top 2": Organic debris; Middle 1-2': Dark brown, fine SAND, little organic matter, moist, loose; Bottom 8": Light yellowish brown, fine SAND, trace Silt, moist, loose	1.3
+	1634623	100		Top 6": Light yellowish brown, fine SAND, moist, loose; Bottom 1.5': Light yellowish brown, fine to medium SAND, moist, loose	0.9
-4	1634624 1634625	83		Yellowish brown, fine to medium SAND, wet, loose, orange-red, Mottles 5-6'	1.0
	1634626	83		Yellowish brown, fine to medium SAND, wet, loose	1.4
8	1634627	46		Yellowish brown, fine SAND, trace medium Sand, wet, loose	1.5
+	1634628	46		As Above	1.4
1 12				Bottom of Boring at 12'	
† 16					
20					
24					
‡					

LEA Com Client: P Location:	ratt & Whit East Hart	V7074 ney ford, CT	or AST	Start Date Boring	•
Drilling Co Drilling M Sampling I Groundwa Depth: Depth:	ethod: G Method: ter Observa	LEA ieoprobe Macro C tions: At: At:	Core Hours	Logged By: J. Trzaski Drilling Foreman: D. Brisse Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	on
Devation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1634629	50		Top 2": Organic debris; Bottom 10": Dark yellowish brow fine SAND, trace Silt, little organic matter, moist, loose	/n, 1.8
† † †	1634630	50		Top 6": Light yellowish brown, fine SAND, trace organic matter, moist, loose; Bottom 6": Light yellowish brown, fine to medium SAND, moist, loose	1.2
+4	1634631	83		Top 6": Light yellowish brown, medium to fine SAND, we loose; Bottom 14": Light yellowish brown, fine to medium SAND, trace(-) coarse Sand, micaceous, wet, loose	ot, 0.2 n
‡ ‡	1834632	83		Top 6": Light yellowish brown, fine to medium SAND, trace(-) coarse Sand, micaceous, wet, loose; Bottom 14" dark yellowish brown, fine to medium SAND, dark brown	
+8	1634633	54		Staining at 7', wet, loose Yellowish brown, fine to medium SAND, wet, loose	0.1
†	1634634	54		As Above, dark brown staining at 8', CLAY at 10.5'	0.2
+12	·			Bottom of Boring at 12'	
†					i
+16 + + + + +					
20					
† †					
+24					
Comments	s: Boring	backfille	d with bent	onite	

Depth:

At:

At:

Project: Add. Investigation NK Soil Piles **Start Date** LEA Comm No: 68V7075 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Geoprobe

Hours

06/06/97 End Date 06/06/97

Boring ID

NK-SB-319

Logged By: J. To Drilling Foreman: J. Trzaski Drilling Method: Sampling Method: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Macro Core Groundwater Observations:

Northing: Easting:

Elevation/ Depth	Samp)e No. 1634694	Recovery (2)	Blows /6*	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 2": Organic debris; Middle 6": Light brown, fine SAND,	(ppm)
Depth	1634694	54	Blows /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	
-4				Ton 2": Organic debris: Middle 6": Light brown fine SAND	
+	1634695			little Silt, dry, loose; Bottom 10": Dark yellowish brown, fine SAND, trace fine to coarse process stone Gravel, dry,	0.0
+4		54		Same as last 10": moist 3-4'	4.0
1	1634696	50		Dark yellowish brown, fine SAND, trace(-) organic matter, moist, loose	6.4
1	1634697 1634698	50		Dark brown, fine SAND, trace Silt, trace medium Sand, wet, loose	6.3
+8	1634699	75		As Above, trace organic matter, Cobble at 9'	7.4
‡	1634700	75		Greyish brown, fine to medium SAND, wet, loose, grading into yellowish brown, fine SAND	7.1
†12 †	1634701	79		Top 8": Yellowish brown, fine SAND, wet, loose; Bottom 14": Yellowish brown, medium to fine SAND, wet, loose	0.7
‡	1634702	79		Grey, varved CLAY, wet, loose, reddish brown staining at Sand/Clay interface	5.0
+16 +				Bottom of Boring at 16'	
	·				
-24					
†			d with beni		

Project: X-407 Area Add. Invest. Start Date **Boring ID** 68V7078 LEA Comm No: 06/13/97 Client: Pratt & Whitney **End Date NK-SB-333** Location: East Hartford, CT 06/13/97 **Drilling Contractor:** Logged By: J. Trzaski Drilling Foreman: J. Klapheke Drilling Method: Geoprobe MC Drill Rig: **GP-5400** Sampling Method: Macro Core **Groundwater Observations:** Surface Elevation: Depth: Hours Northing: Easting: Hours Depth: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (pom) Sedimentary Structures, Density, Cohesiveness 1635787 0.0 98 Yellowish, brown to dark yellowish brown, fine SAND with Silt, trace organic matter, trace fine and coarse Gravel; Top 8": Dry to slightly moist, loose 1635788 98 11.1 Top 12": Dark brown, fine SAND with Silt; Middle 4": Grey SILT and very fine SAND, moist, dense, slightly moist to moist, loose; Bottom 8": Light olive brown, fine to very fine SAND, moist, loose 83 0.0 1635789 Dark yellowish brown, fine to medium SAND, wet, loose 1635791 83 7.4 Top 6": Grey, fine SAND, trace medium Sand, wet, loose Bottom 14": Greyish brown to light olive brown, fine(+) to medium SAND, wet, loose. 8 1635792 83 1.0 Yellowish brown, fine(+) to medium SAND, wet, loose 1635793 83 1.3 Top 12": As above, trace coarse SAND; Bottom 8": Grey, varved CLAY, wet, loose 12 Bottom of Boring at 12' 16 20 Comments: Boring backfilled with bentonite

Page 1 of 1 Project: X-407 Area Add. Invest. Start Date Boring ID LEA Comm No: 68V7078 06/13/97 Client: Pratt & Whitney **End Date** NK-SB-334 East Hartford, CT Location: 06/13/97 Logged By: J. Trzas Drilling Foreman: Drill Rig: GP-5400 LEA **Drilling Contractor:** J. Trzaski Drilling Method: Geoprobe MC J. Klapheke Sampling Method: Macro Core Surface Elevation: **Groundwater Observations:** Northing: Depth: At: Hours Easting: Depth: At: Hours Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/

Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ļ°	1635794	79		Top 2": Black bituminous asphalt; Middle 7": Brown, fine SAND, little Silt, trace process stone, fine and coarse Gravel, dry, loose; Bottom 10": Dark brown, SILT with fine Sand, trace organic matter, slightly moist, dense	4.2
+	1635795	79		Top 6": Brown, fine SAND, slightly moist, loose; Middle 3": Grey, SILT and very fine Sand, moist, dense; Bottom 10": Light brown to brown, very fine to fine SAND, moist, loose	3.0
+	1635796	83		Yellowish brown, fine to medium SAND, wet, loose	5.8
‡	1635797	83		As Above, Trace coarse SAND in bottom 8"	4.0
+8	1635798	75		As Above, trace(-) coarse SAND	4.6
	1635799	75		Top 10": As Above; Bottom 9": Grey, varved CLAY, wet, loose	4.0
-12	_			Bottom of Boring at 12'	
†					
+16					
+					
20					
‡					
24					
Comments	Posino	bookfille	d with ber	ntanita	L

Project: X-407 Area Add. Invest. Start Date Boring ID LEA Comm No: 68V7078 06/13/97 Client: Pratt & Whitney **End Date NK-SB-335** Location: East Hartford, CT 06/13/97 Logged By: J. To Drilling Foreman: **Drilling Contractor:** J. Trzaski Geoprobe MC Drilling Method: J. Klapheke Sampling Method: Drill Rig: GP-5400 Macro Core Surface Elevation: **Groundwater Observations:** Depth: Northing: At: Depth: At: Hour Easting: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Sample No. Blows Depth Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1635800 83 2.6 Top 4": Black asphalt with process stone fine and coarse Gravel; Middle 6": Yellowish brown, fine SAND, slightly moist, loose; Bottom 10": Dark brown to black, SILT, some fine Sand, slightly moist, moderately dense 1635801 83 2.8 Top 6": Same as last 10"; Bottom 14": Brown, fine SAND, little very fine Sand, moist, loose 1635802 92 4.0 Top 8": Same as last 14": wet; Bottom 14": Yellowish brown, fine to medium SAND, wet, loose 1635803 92 Yellowish brown, fine(+) to medium SAND, little very fine 2.7 Sand, wet, loose No Recovery No Recovery 12 Bottom of Boring at 12' Printed On: 1/21/1998 16 20 Boring backfilled with bentonite Comments:

Project: X-407 Area Add. Invest.	M	Start Date	Boring ID
LEA Comm No: 68V7078 Client: Pratt & Whitney		06/13/97 End Date	1
Location: East Hartford, CT		06/13/97	NK-SB-336
Drilling Contractor: LEA			J. Trzaski

Drilling Contractor: LEA

Drilling Method: Geoprobe MC
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Depth: At: Hours

Easting:

Logged By: J. Trzaski
Drilling Foreman: J. Klapheke
Drill Rig: GP-5400
Surface Elevation:
Northing:
Easting:

		At:	Hours	₹ Easting:		
Elevation/ Depth S	Sample Information			Sample Description		
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1635804	95		6": Asphalt - Punched, No Recovery; 20": Dark brown, SILT and fine to medium SAND with fine Gravel, dense, moist; 20": Brown, fine to medium(+) SAND, little Silt, moist, loose	2.1	
14	1635806	92		As Above, wet	2.4	
† † †	1635807				4.4	
8	1635808	100		36": Brown, fine to coarse SAND, trace fine Gravel, trace Silt, wet, loose; 12": Grey, CLAY, with Silt, trace fine	2.9	
‡	1635809			Sand, wet, laminated	2.5	
+12						
† + + + +				Bottom of Boring at 12'		
16						
20						
24						
1						
1						

Project: X-407 Area Add. Invest. LEA Comm No: 68V7078 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Sampling Method: Geoprobe MC

Macro Core

Groundwater Observations: Depth: Hours **Start Date** 06/13/97 **End Date** 06/13/97

Boring ID

NK-SB-337

Logged By: J. Klaphel Drilling Foreman: J. Drill Rig: GP-5400 Surface Elevation: J. Klapheke J. Trzaski

Elevation/ Depth		pple Informa	ion	Comple Description	T	
				Sample Description		
	Sample No.	Recovery (%)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
	1635810	75		10": Grey, fine GRAVEL and fine to coarse SAND, little Silt, dry to slightly moist, loose; 14": Black to grey green, SILT, with fine SAND, slightly moist, dense; 12": Brown, fine(+) to medium SAND, moist, loose	2.7 3. 5	
+4	1635812	62		Brown, medium to coarse SAND, trace fine Sand, trace Silt, wet, loose	2.8	
† †	1635813				2.7	
+8 +	1635814	100		42": Brown, fine to coarse SAND, little Silt, wet, loose to slightly dense	1.4	
† †	1835815	100		6": Grey, CLAY with Silt, trace fine Sand, laminated, wet, dense	1.6	
12				Bottom of Boring at 12'		
16						
-20						
-24						
Comment	s: Boring	backfille	d with bent	onite		

Depth:

Project: Expl. Storage Building:UST
LEA Comm No: 68V7085
Client: Pratt & Whitney
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core/Large Core
Croundwater Observations

At:

Hours ₹

Start Date 07-15-97 **End Date** 05-15-97

Boring ID NK-SB-338

Logged By: M. Budnick
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing: D. Brisson

Depth:		At:	Hours	Easting:	
_	Sar	mple Informa	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1637979	96		Top 6": Dark brown, fine to very fine SAND, trace organic materials, root material, moist, moderately dense	3.8
†	1637980	96		Bottom 27": Brown, fine SAND, moist, moderately dense	4.3
1 4	1637981	75	l	Top 10": As Above, grey to grey-brown; Bottom 8": Brown, fine to medium SAND, wet, loose; As Above	4.2
‡ †	1637982	75		As Above	4.1
+8				Bottom of Boring 8!	
I .					
+ + +12					
1 -					<u>.</u>
† †					
16			!		
Ī					
+20					
+					
‡					
24					
Comments					<u></u>
	•				

Project: Expl. Storage Building: UST Start Date **Boring ID** 07-15-97 LEA Comm No: 68**V**7085 Client: Pratt & Whitney **End Date** NK-SB-339 Location: East Hartford, CT 05-15-97 **Drilling Contractor:** Logged By: M. Budnick Drilling Method: Drilling Foreman: D. Brisson Geoprobe Sampling Method: Macro Core/Large Core Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Depth: At: Hours Northing: Hours **Easting:** Depth: At: Sample Information Sample Description Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1637983 88 Top 6": Dark brown, fine SAND, trace organic material, root material, moist, moderately dense; Bottom 15": Brown, fine SAND, moist, moderately dense 1637985 1637984 88 3.4 As Above, moist to wet at 4' 1637986 88 4.2 Top 10": As Above; Grey to grey-brown; Bottom 8": Brown, fine to medium SAND, wet, loose 1637987 88 4.0 As Above Bottom of Boring 8' 12 Printed On: 2/9/1998 16 20 Boring Comments: š

Project: Expl. Sto LEA Comm No: (rage Build 88V7085	ing:UST	
Client: Pratt & W	hitney		
Location: East Ha	rtford, CT		
Drilling Contractor:	LEA		
Drilling Method:	Geoprobe	1	
Sampling Method:	Macro (Core/Large	Col
Groundwater Obser	vations:	_	
Depth:	At:	Hours	<u>₹</u>
Depth:	At:	Hours	-

Start Date 07-15-97 End Date 05-15-97

Boring ID NK-SB-340

Logged By: M. Budnick
Drilling Foreman: D. Brisson
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

vepu.						
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1637988	96		Top 8": Drk brown, fine to very fine SAND and SILT, trace organic material, moist, loose; Bottom 15": Brown, fine SAND, moist to wet, moderately dense	3.1	
‡	1637989			Grey-orange brown, fine SAND, moist to wet, moderately dense	3.2	
+4	1637990	88		Top 15": As Above; Bottom 6": Brown, fine SAND, moist, moderately dense, iron-staining present	3.3	
† †	1637991			As Above	3.6	
8				Bottom of Boring 8'		
+ + + + 12						
	·					
+ + 16						
+20						
24						
Ī						

Boring ID

Project: Expl. Storage Area, Chem. Bldg. **Start Date** LEA Comm No: 68**V**7084 07/16/97 Client: Pratt & Whitney Location: East Hartford **End Date** NK-SB-341 East Hartford, CT 07/16/97 Logged By: D. Brisson
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: **Drilling Contractor:** LEA Drilling Method: Sampling Method: D. Brisson Geoprobe Macro Core **Groundwater Observations:** Depth: NR Northing: Hours

Depth:	At: Hours						
	San	nple Inform	ation	Sample Description			
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
0	1637999	75		Top 6": Brown to strong brown, fine to very fine SAND, trace(-) medium Sand, trace organics, moist, moderately dense; Bottom 12": Yellow, orange to grey, brown, fine	4.0		
<u> </u>	1638000 1638001	75		SAND, trace(-) medium Sand, moist, loose As Above, Bottom 12"	4.3		
+4	1638002	83		Top 18": Yellow orange, fine SAND, trace(+) medium Sand, wet, loose; Bottom 2": Brown, fine to very fine SAND, wet, loose	3.3		
<u> </u>	1638003	83		Light brown, fine SAND, trace(+) medium Sand, wet, loose	4.7		
+8	1638004	100		Top 3": As Above; Bottom 21": Grey, CLAY, thinly laminated with fine to very fine Sand and Silt, wet, loose	3.3		
‡	1638005	100		As Above	0.0		
12				Bottom of Boring at 12'			
Ŧ							
16							
† †							
<u>+</u> 20							
1					1		
+24							
Comments	: Boring	begins a	at base of c	oncrete, 4" of concrete cored.	l		

LEA Com	m No: 68 ratt & Whit	√7084 tney	Chem. Bld	07/78/97° End Date	ng ID
Drilling Co Drilling M Sampling I Groundwa Depth: N Depth:	ontractor: ethod: G Method: ter Observa R	LEA ieoprobe Macro (Logged By: D. Brisson Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	B-342 sson
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1638006	88		Top 12": Brown to strong brown, fine to medium SANI trace(-) medium Sand, trace(+) Silt, moist, loose; Bott 6": Yellow Orange to grey brown, fine SAND, trace(-)	
† † † +	1638007	88		medium Sand, moist, loose As Above, bottom 6"	0.0
+4	1638008	88		Light brown, fine SAND, trace(-) medium Sand, wet, lo	ose 0.0
‡	1638009	88		As Above	0.0
***	1638010	100		Top 12": As Above grading to very fine SAND, trace(-) Bottom 12": Grey, CLAY, thinly laminated with fine to fine Sand and Silt, wet, loose	Silt; 0.0
‡	1638011	100		As Above	0.0
12	•			Bottom of Boring at 12'	·
16				·	
-20 -					
-24					
Comments	5:	<u>. I </u>			

Project: X-194 Add. Inv. Former AST **Start Date Boring ID** LEA Comm No: 68V7062 08/29/97 Client: Pratt & Whitney **End Date NK-SB-343** Location: East Hartford, CT 08/29/97 Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: **Drilling Contractor:** LEA D. Brisson **Drilling Method:** Geoprobe Sampling Method: Macro Core Groundwater Observations: Hoù Northing: Depth: Depth: At: Hour Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 88 4.7 1641767 Top 2": Fibric organic debris; Middle 30": Yellowish brown to brown, fine SAND, little Silt, trace fibric Organic Matter, moist to wet, loose; wet @ 25"; Bottom 10": Brown, fine SAND, little medium Sand, trace Silt, wet, loose 1641768 4.1 Bottom of Boring 4' 16 20 24 Comments:

Project: X-194 Add. Inv. Former AST LEA Comm No: 68V7062 Start Date **Boring ID** 08/29/97 Client: Pratt & Whitney **End Date NK-SB-344** Location: East Hartford, CT 08/29/97 Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: **Drilling Contractor: LEA Drilling Method:** Geoprobe D. Brisson Sampling Method: Mac Groundwater Observations: Macro Core At: Northing: Depth: Hours Hours Depth: At: Easting:

	Son	ple Informs	tion	Sample Description	
Elevation/ Depth	- Sample No.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1641769 1641770	88		Cored through 5" concrete; Top 6": Concrete pieces and dust; Middle 12": Yellowish brown to brown, fine(+) to very fine SAND, trace Silt, moist, loose; Bottom 24": Brown, fine SAND, little moist Sand, trace Silt, moist to wet, loose, wet @ 10'	6.0 3.8
+4				Bottom of Boring at 4'	
8			İ	·	
12					
16					
20				·	
24					

Project: X-194 Add. Inv. Former AST Start Date **Boring ID LEA Comm No:** 68V7062 08/29/97 Client: Pratt & Whitney **End Date NK-SB-345** Location: East Hartford, CT 08/29/97 **Drilling Contractor:** Logged By: **LEA** J. Trzaski **Drilling Method:** Drilling Foreman: D. Brisson Geoprobe Macro Core Geoprobe 5400 Sampling Method: Drill Rig: Groundwater Observations: Surface Elevation: Depth: Hours Northing: At: Hours Easting: Depth: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth tcovery (な) Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 0 1641771 75 5.4 Top 26": Yellowish brown, fine SAND, little Silt, trace fibric organic matter (top 10"), slightly moist to moist, loose; Bottom 10": Brown, fine SAND, trace medium Sand, trace Silt, wet, loose, black-staining bottom 2", metal 1641772 4.8 shard at bottom, iron staining at bottom Bottom of Boring at 4' 12 16 20 Comments:

Project: Fire Training Area "B"
LEA Comm No: 68TR664
Client: Pratt & Whitney East Hartford Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Macro core Groundwater Observations: Depth: NM Depth: At: Hours Hours At:

Start Date 7/31/96 **End Date** 7/31/96

Boring ID

SA-SB-10

Logged By: L. Bi Drilling Foreman: L. Bianchi reman: J. Sweeton Geoprobe 5400 Drill Rig: Geopre Surface Elevation:

Northing: Easting:

Depth:	At: Hours		Hours	₩ Easting:			
	Sample Information			Sample Description			
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
	1016466	100		Reddish brown, fine SAND, little Silt, trace medium Sand, moist, moderately loose, root fragments	0.4		
‡	1016467 1016468	100		Yellowish brown, fine to medium SAND, little Silt, trace coarse Sand, moist, loose	0.0 0.2		
+4	1016469	100	,,	12": Greyish brown, fine SAND, little medium Sand, trace Silt, very moist, loose; 12": Yellowish grey, medium SAND, some coarse Sand, little fine Sand, trace Silt, wet, loose	0.2		
<u>.</u>	1016470	100		5": As above; 7": Dark grey, fine SAND, with medium Sand, some Silt, trace coarse Sand, wet, moderately loose; 2": Black, fine to medium SAND, with Silt, trace coarse Sand, wet, loose; 9": Olive brown, fine SAND, with Silt, trace	21.0		
Ţ.	1016471	100		medium Sand 8": As above; 15": Olive grey, fine SAND, some Silt, wet, slightly loose	30.0		
Ī	1016472	100		As above	12.0		
+12	1016473	100		18": Dark yellowish red, medium SAND, with fine Sand, some, coarse Sand, trace Silt, wet, loose; 5": Olive grey, varved CLAY, trace Silt, wet, stiff	0.2		
‡	1016474	100		As above	0.0		
16				Bottom of boring at 15.0'	·		
Commente	: Boreho	ole backfil	led with be	entonite chips upon completion.	<u> </u>		

Printed On: 1/20/1998

GEOLOGIC BORING LOG Page 1 of 1 Project: Fire Training Area "B" tart Date **Boring ID** 68TR664 7/31/96 LEA Comm No: Client: Pratt & Whitney East Hartford nd Date SA-SB-11 Location: East Hartford, CT 7/31/96 Logged By: L. Bianchi **Drilling Contractor:** Drilling Foreman: Drilling Method: Geoprobe J. Sweeton Drill Rig: Geoprobe 5400 Sampling Method: Macro core Surface Elevation: **Groundwater Observations:** Depth: NM Hours Northing: At: Hours Easting: Depth: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 0 1016475 100 0.0 4": Dark brown, fine SAND, little Silt, trace medium Sand, moist, loose, root fragments; 19": Reddish brown, fine SAND, little Silt, trace medium Sand, moist, moderately loose, root fragments 1016476 100 0.0

17": Light yellowish grey, medium SAND, little fine Sand, trace(+) coarse Sand, trace(-) Silt, moist, loose; 6": Olive brown, fine SAND, trace Silt, moist, loose 1016477 100 0.0 12": As above; 11": Dark yellowish red, medium SAND, with fine Sand, some coarse Sand, little Silt, trace fine Gravel, wet, loose 0.0 100 1016478 Olive brown, fine to medium SAND, little Silt, trace coarse Sand, wet, loose 1016479 100 0.0 Olive brown, fine SAND, some Silt, trace medium Sand, wet, moderately, loose 1016480 100 0.0 2": As above; 21": Dark yellowish red, medium SAND, with fine Sand, some coarse Sand, little Silt, trace fine Gravel, wet, loose 12 1016481 100 0.0 As above 1016482 100 2": As above; 10": Olive grey, varved CLAY, trace Silt, wet, Bottom of boring at 15.0' 16 20

Comments:

Borehole backfilled with bentonite chips upon completion.

×

Project: Fire Training Area "B"

LEA Comm No: 68TR664

Client: Pratt & Whitney East Hartford

Location: East Hartford, CT

Drilling Contractor: LEA

Drilling Method: Geoprobe

Sampling Method: Macro core

Groundwater Observations:

Depth: NM At: Hours

Hours Hours

Start Date 7/31/96 End Date 7/31/96

Boring ID

SA-SB-12

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

Sample No.	Recovery		Sample Description Color, Primary Grain Size, Secondary Grain Sizes,	
Sample No.	Recovery	Blave	Color, Primary Grain Size, Secondary Grain Sizes.	1
	(2)	Blows /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
1016483	100		Reddish brown, fine SAND, little Silt, trace medium Sand, moist, moderately loose, root fragments	0.0
1016484	100		Yellowish brown, fine to medium SAND, little Silt, trace coarse Sand, moist, loose	0.7
1016485	100		17": Greyish brown, fine SAND, little medium Sand, trace Silt, very moist, loose; 6": Yellowish grey, medium SAND, some coarse Sand, little fine Sand, trace Silt, wet, loose	0.0
1016486	100		3": As above; 7": Dark grey, fine SAND, with medium Sand, some Silt, trace coarse Sand, wet, loose; 13": Black, medium to fine SAND, with Silt, trace coarse Sand, wet,	50.
1016487	100		8": Olive brown, fine SAND, with Silt, trace medium Sand, wet, loose; 15": Olive grey, fine SAND, some Silt, wet,	2.0
1016488	100		As above	1.7
1016489	100		18": Dark yellowish red, medium SAND, with fine Sand, some coarse Sand, trace Silt, wet, loose; 5": Olive grey, varved CLAY, trace Silt, wet, stiff	0.8
1016490	100		As above	0.2
			Bottom of boring at 15.0'	
			•	
	1016485 1016486 1016487 1016488	1016485 100 1016486 100 1016487 100 1016488 100	1016485 100 1016486 100 1016487 100 1016488 100 1016489 100	1016484 100 Yellowish brown, fine to medium SAND, little Silt, trace coarse Sand, moist, loose 1016485 100 17": Greyish brown, fine SAND, little medium Sand, trace Silt, very moist, loose; 6": Yellowish grey, medium SAND, some coarse Sand, little fine Sand, trace Silt, wet, loose 1016486 100 3": As above; 7": Dark grey, fine SAND, with medium Sand, some Silt, trace coarse Sand, wet, loose; 13": Black, medium to fine SAND, with Silt, trace coarse Sand, wet, loose 1016487 100 8": Olive brown, fine SAND, with Silt, trace medium Sand, wet, loose; 15": Olive grey, fine SAND, some Silt, wet, slightly loose As above 1016489 100 18": Dark yellowish red, medium SAND, with fine Sand, some coarse Sand, trace Silt, wet, loose; 5": Olive grey, varved CLAY, trace Silt, wet, stiff 1016490 100 As above

LEA

Groundwater Observations:

Depth: NM

Project: Fire Training Area "B" LEA Comm No: 68TR664 Client: Pratt & Whitney East Hartford Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro core

At:

Hours

art Date 8/2/96 End Date 8/2/96

Boring ID **SA-SB-13**

Logged By: J. Klapheke Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 Surface Elevation: J. Sweeton

Depth:	At: Hours		Hours	Easting:		
Elevation/ Depth	Sample Information			Sample Description		
	Sample Mo.	Recovery (%)	Blows ⁄6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm	
T°	1016494	100		Dark reddish brown, fine(+) to coarse SAND, little fine Gravel, slightly moist, loose, rooted in upper 10", concrete fragments	1.4	
Ī	1016495	100		As above, no roots	1.4	
+4	1016496	75		As above, moist to wet	1.0	
Ī	1016497	75		Brown to light greyish brown, medium to coarse (+) SAND, with fine Gravel, wet, loose	1.9	
+8	1016498	75		As above, some iron staining	1.9	
Ī	1016499	75		As above	1.8	
12	1016500	25		As above	-	
† † †				No recovery		
+16 + + + +				Bottom of boring 16'		
20						
+++++++++++++++++++++++++++++++++++++++						
-24						
Comment	s: Boreho	ole backfi	led with be	entonite chips upon completion.		

Project: Fire Training Area "B" LEA Comm No: 68TR664

Client: Pratt & Whitney East Hartford Location: East Hartford, CT

Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macro core

Groundwater Observations: Depth: NM At:

Hours

Start Date 8/2/96 **End Date** 8/2/96

Boring ID

SA-SB-14

J. Klapheke Logged By:

Drilling Foreman: J. Swo Drill Rig: Geoprobe 5400 Surface Elevation: J. Sweeton

Depth:		At: At:	Hours Hours	Northing:	
Elevation/ Depth	Sample Information			Sample Description	
	Sample No.	Recovery (X)	Blows ⁄6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1016502	100		Dark reddish brown, fine(+) to medium SAND, trace fine Gravel, slightly moist to moist, slightly dense to loose, top 10" rooted	2.3
Ī -	1016503	100		Dark reddish brown, fine(+) to medium SAND, moist, slightly dense	4.0
+4	1016504	83		As above	3.4
+++++++++++++++++++++++++++++++++++++++	1016506	83		Light grey brown, coarse(+) to medium SAND, some fine Gravel, moist to wet, slightly dense	3.0
-8	1016506	75		Light greyish brown, coarse to very coarse SAND, with fine Gravel, wet, loose, occasional iron staining	2.2
‡	1016507	75		As above	3.4
12	1016508	63		Light grey brown, fine to coarse SAND, some coarse Sand, wet, loose	2.0
Ī	1016509	63		As above	2.0
16				Bottom of boring at 16'	
20					
† † †			·		
- 24					
t		1 1		•	1

Project: Fire Training Area "B" Start Date Boring ID LEA Comm No: 68TR664 B/2/96 Client: Pratt & Whitney East Hartford End Date SA-SB-15 Location: East Hartford, CT 8/2/96 **Drilling Contractor:** Logged By: J. Klapheke Drilling Foreman: Drilling Method: Geoprobe J. Sweeton Sampling Method: Drill Rig: Geoprobe 5400 Macro core **Groundwater Observations:** Surface Elevation: Depth: NM At: Hours Northing: Hours Depth: Easting: At: Sample Description Sample Information Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, (2) Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness Dark reddish brown, fine SAND, with Silt, slightly moist, slightly dense, upper 10" rooted 1016510 100 2.6 1016511 100 3.2 As above, slightly moist to moist, no rooting 1016512 83 3.6 As above, moist 1016513 83 2.9 Light grey brown, fine to coarse SAND, trace Silt, moist to wet, loose, coarsening down 1016514 76 4.0 Light grey brown, fine to coarse(+) SAND, little fine Gravel, wet, loose 3.0 1016515 75 As above 1016516 1.5 75 Reddish brown, coarse to very coarse SAND, with fine Gravel, wet, loose 1016517 75 0.5 As above 16 Bottom of boring 16' 20 24 Borehole backfilled with bentonite chips upon completion. Comments:

Project: Fire Training Area "B" LEA Comm No: 68TR664

Client: Pratt & Whitney East Hartford

Location: East Hartford, CT

Drilling Contractor: LEA

Drilling Method: Geoprobe

Sampling Method: Large bore/Macro core

Groundwater Observations:

Depth: 6.2 Depth: At: 0 At: Hours Hours Start Date 8/5/96 End Date 8/5/96

Boring ID

SA-SB-16

F. Postma Logged By:

Drilling Foreman: J. Sweeton

Drill Rig: Geoprobe Surface Elevation:

Northing:

Easting:

Depth:	F	\t:	Hours	♥ Kasting:	
	San	nple Informat	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
ļ	1016518	90		Brownish yellow, fine SAND, trace(+) medium Sand, loose, moist, lense of silty Sand at 1.3'	0.6
† † †	1016519	90		Yellowish red, medium SAND, little coarse Sand, loose, moist	0.9
+4	1016520	60		As above	3.8
Ĭ 	1016521	60		Reddish brown, medium SAND, some fine Sand, little coarse Sand, loose, wet	1.2
+8	1016522	100		As above, dark brown staining at 8.9', fine Sand lense at 9.6' to 9.8'	0.5
‡	1016523	100		As above; Dark brown staining at 12'	, 1.4
12	1016524	70		As above; Bottom 4": Brownish yellow, medium SAND, some fine Sand, trace coarse Sand, loose, wet	2.0
‡	1016525	70		As above	0.0
16				Bottom of boring 15'	
20					
-24					

Boring No: SA-SB-16

Printed On: 1/21/1998

Project: Fire Training Area "B" LEA Comm No: 68TR664 Start Date 8/5/96 Client: Pratt & Whitney East Hartford **End Date** Location: East Hartford, CT 8/5/96 Logged By: **Drilling Contractor:** Drilling Method: Geoprobe Sampling Method: Maci Groundwater Observations: Depth: 7.2 At: 0 Macro core Northing: Hours ₹

Boring ID

SA-SB-17

F. Postma Drilling Foreman: J. Swo Drill Rig: Geoprobe 5400 Surface Elevation: J. Sweeton

Depth:		At:	Hours	Easting:	
	San	npie Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T°	1016526	100		Brown, fine SAND, trace(-) Silt, loose, moist	2.3
‡	1016527	100		Brownish red, medium SAND, some fine Sand, trace(-) Silt, loose, moist; Brownish yellow, medium SAND, moist, some fine Sand, loose	1.5
+4	1016528	70		As above	2.4
† 	1016529	70		As above, wet at 7.2'	3.8
8	1016530	100		As above	2.0
	1016531	100		Top 2": As above; Bottom 22": Red to dark reddish brown, medium SAND, little fine Sand, little coarse Sand, loose, wet, iron staining, mottles	1.8
+12	1016532	80		Top 1': As above; Bottom 7": Olive yellow, medium SAND, some fine Sand, trace coarse Sand, loose, wet	3.5
+	1016533	80		As Above Sand, loose, wet	4.0
16				Bottom of boring at 15'	
20			·		
24					
Comments	Roreho	ole backfil	led with be	entonite chips upon completion.	



Project: Fire Training Area "B"
LEA Comm No: 68TR664
Client: Pratt & Whitney East Hartford

Hours

Hours

Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro core

Groundwater Observations: Depth: 7.1 At: 0

Depth: At: Start Date 8/5/96 End Date 8/5/96

Boring ID

SA-SB-18

Logged By: F. Postma
Drilling Foreman: J. Swo
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

rehm.		<u> </u>	шишъ	F Calsuing:	
,	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1016534	100		Strong brown to brown, fine SAND, trace Silt, trace medium Sand, loose, moist, root hairs	2.4
†	1016535	100		Brownish yellow, medium SAND, some fine Sand, trace coarse Sand, loose, moist	2.1
+4	1016536	70	.,,,,	As above	1.6
+ Ž	1016537	70		As above, wet at 7.1'	3.2
+ 8	1016538	100		As above	2.8
	1016542 1016539	100		Dark reddish brown, medium SAND, some fine Sand, trace(+) coarse Sand, loose, wet, iron staining, mottles	1.8
12	1016540	50		Top 1': Brown, medium SAND, some fine Sand, trace(+) coarse Sand, loose, wet; Bottom 6": Olive yellow, fine SAND, loose, wet	1.9
‡	1016541	50		As above	1.9
16				Bottom of boring at 15'	
20					
24					
Comments				entonite chips upon completion.	<u> </u>

ocation: Drilling Contilling Manual M	Method: ter Observa	ford, CT LEA leoprobe Macro co tions:	ore	2P	Drilling Foreman:	robe 5400	9
)epth: N)epth:		Lt: Lt:	Hours Hours	* //	Rortning: Easting:		
	San	aple Informati	003		Sample Description		
levation/ epth	Sample No.	Recovery (%)	Biows ⁄6°	Moisture,	y Grain Size, Secondary G Sorting, Sphericity, Angul Structures, Density, Cohe	arity,	(ppm
°	1016706	100		fine Sand, trace fin Dark yellowish brown	, medium SAND, some co e Gravel, slightly moist, k wn, fine SAND, some Silt	oose; 17":	N/A
Ī	1016707	100		Sand, moist, slight Yellowish brown, r coarse Sand, moist	nedium SAND, some fine	Sand, trace	N/A
+4	1016708	100		As above, wet ≈ 5	5.5 to 6.0'		N/A
†	1016709	100		As above, wet			N/A
8	1016710	100			y, medium SAND, some f Silt, trace(-) fine Gravel,		N/A
‡	1016711	100			v, fine SAND, with mediu and, trace fine Gravel, we		N/A
+12	1016712	100		Yellowish brown, f Sand, wet, loose	ine SAND, some Silt, trac	e(-) medium	N/A
‡	1016713	100		As above			N/A
16				Bottom of boring a	t 15'		
20							
24							
Comment	Baraba	la beakfil	ad with h	entonite chips upon d	completion		<u> </u>

Project: Contractor Storage Area LEA Comm No: 68TR664 Client: Pratt & Whitney East Hartford Location: East Hartford, CT **Drilling Contractor:** Drilling Method: Sampling Method: Geoprobe Macro core **Groundwater Observations:** Depth: N/M Hours Start Date 8/6/96 and Date 8/6/96

Boring ID

SA-SB-20

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Sample Information Sample Description	Depth:	At	t:	Hours	₩ Easting:	
Same Recovery Biges Moisture, Sorting, Sphericity, Angularity, Angularity, Sedimentary Structures, Density, Cohestveness 12": Reddish brown, medium SAND, some coarse Sand, little fire Sand, trace fire Gravel, slightly moist, loose; 11": Dark yellowish brown, mine SAND, some Silt, trace medium SAND, some Silt, trace medium SAND, some fine Sand, trace Sand, moist, loose Yellowish brown, medium SAND, some fine Sand, trace 0.0		Samp	le Informa	tion	Sample Description]
little fine Sand, trace fine Gravel, slightly moist, loose; 11*: Dark yellowish brown, fine SAND, some Silt, trace medium Sand, moist, slightly loose Yellowish brown, medium SAND, some fine Sand, trace coarse Sand, moist, loose As above, wet ≈ 5.5-6.0¹ 1016700 As above, wet ≈ 5.5-6.0¹ Dark yellowish grey, medium SAND, some fine Sand, little coarse Sand, trace Silt, trace(-) fine Gravel, wet, loose 1016702 Dark reddish yellow, fine to medium SAND, with Silt, little coarse Sand, trace fine Gravel, wet, loose 1016703 Yellowish brown, fine SAND, some Silt, trace(-) medium Sand, wet, moderately loose 1016704 As above 0.0 Bottom of boring at 15.0¹		Sample No.	Recovery (%)	Blows /6"	Moisture, Sorting, Sphericity, Angularity,	
Yellowish brown, medium SAND, some fine Sand, trace coarse Sand, moist, loose As above, wet ≈ 5.5-6.0¹ 1016700 As above, wet 1016701 Dark yellowish grey, medium SAND, some fine Sand, little coarse Sand, trace Silt, trace(-) fine Gravel, wet, loose 1016702 Dark reddish yellow, fine to medium SAND, with Silt, little coarse Sand, trace fine Gravel, wet, loose 1016703 Yellowish brown, fine SAND, some Silt, trace(-) medium Sand, wet, moderately loose 1016704 As above Bottom of boring at 15.0¹	0				little fine Sand, trace fine Gravel, slightly moist, loose; 11": Dark yellowish brown, fine SAND, some Silt, trace medium	
1016700 As above, wet 0.0 Dark yellowish grey, medium SAND, some fine Sand, little coarse Sand, trace Silt, trace(-) fine Gravel, wet, loose Dark reddish yellow, fine to medium SAND, with Silt, little coarse Sand, trace fine Gravel, wet, loose Yellowish brown, fine SAND, some Silt, trace(-) medium Sand, wet, moderately loose 1016704 As above 0.0 Bottom of boring at 15.0'	+	1016698			Yellowish brown, medium SAND, some fine Sand, trace	0.0
Dark yellowish grey, medium SAND, some fine Sand, little coarse Sand, trace Silt, trace(-) fine Gravel, wet, loose Dark reddish yellow, fine to medium SAND, with Silt, little coarse Sand, trace fine Gravel, wet, loose Yellowish brown, fine SAND, some Silt, trace(-) medium Sand, wet, moderately loose 1016704 As above Dark reddish yellow, fine to medium SAND, with Silt, little coarse Sand, trace fine Gravel, wet, loose Yellowish brown, fine SAND, some Silt, trace(-) medium Sand, wet, moderately loose Dark reddish yellow, fine to medium SAND, with Silt, little coarse Sand, trace fine Gravel, wet, loose O.0 Dark reddish yellow, fine to medium SAND, with Silt, little coarse Sand, trace fine Gravel, wet, loose Yellowish brown, fine SAND, some Silt, trace(-) medium O.0 Battom of boring at 15.0'	-4	1016699			As above, wet ≈ 5.5-6.0'	0.0
coarse Sand, trace Silt, trace(-) fine Gravel, wet, loose 1016702 Dark reddish yellow, fine to medium SAND, with Silt, little coarse Sand, trace fine Gravel, wet, loose Yellowish brown, fine SAND, some Silt, trace(-) medium Sand, wet, moderately loose 1016704 As above 0.0 Bottom of boring at 15.0'	+	1016700			As above, wet	0.0
12 1016703 Yellowish brown, fine SAND, some Silt, trace(-) medium Sand, wet, moderately loose 0.0 1016704 As above 0.0 Bottom of boring at 15.0'	-8	1016701		-		0.0
Yellowish brown, fine SAND, some Silt, trace(-) medium Sand, wet, moderately loose 1016704 As above Bottom of boring at 15.0'	+	1016702				0.0
Bottom of boring at 15.0'	+12	1016703				0.0
-16 20 24	<u>†</u>	1016704			As above	0.0
	16				Bottom of boring at 15.0'	
	20					
	+ 24					
	<u> </u>					

Project: Contractor Storage Area LEA Comm No: 68TR664
Client: Pratt & Whitney East Hartford Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro core Groundwater Observations:
Depth: N/M At: Hours Start Date 8/6/96 **End Date** 8/6/96

Boring ID

SA-SB-21

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Depth:		At:	Hours	Northing: Easting:	
	Sai	mple Informati	OET	Sample Description	1
Devation/ Depth	Sample No.	Recovery (%)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
ļ°	1016682	100		18": Reddish brown, medium SAND, some coarse Sand, little fine Sand, trace fine Gravel, slightly moist, loose; 5": Yellowish brown, fine SAND, little medium Sand, trace Silt, moist, loose	0.0
‡	1016683	100		As above	0.0
+4	1016684 1016685	100		As above, wet ≈ 5.5'-6.0'	0.0
+	1016686	100		As above, wet	0.0
8	1016687	100		Dark yellowish brown, fine to medium SAND, some coarse Sand, little Silt, wet, loose	0.0
†	1016688	100		Dark yellowish brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, wet, loose	0.0
12	1016695	100		Olive brown, fine SAND, some Silt, little medium Sand, trace(+) coarse Sand, trace(-) fine Gravel, wet, moderately loose	0.0
‡	1016696	100		As above	0.0
† +16	3			Bottom of boring at 15.0'	
20	,				
† † † †				·	
+24	•				
Comme	nts: Boreh	ole backfil	led with be	entonite chips upon completion.	l

LEA Com	Contractor n No: 68 ratt & Whit East Hart	TR664 mey East		Start Date 8/6/96 Boring II SA-SB-2	1
Drilling Co Drilling Mo Sampling N	ntractor: ethod: G Method: ier Observa /M	LEA eoprobe Macro d		Logged By: L. Bianchi Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T °	1016675	100		12": Reddish brown, medium SAND, some coarse Sand, little fine Sand, trace fine Gravel, slightly moist, loose; 11": Yellowish brown, fine SAND, little medium Sand, trace Silt,	0.0
T t	1016676	100		As above	0.0
+4	1016677	100		As above, wet ≈ 5.5'-6.0'	0.0
<u> </u>	1016678	100		As above, wet	0.0
- 8	1016679	100		Dark yellowish brown, fine SAND, some coarse Sand, little Silt, trace fine Gravel, wet, loose	0.0
† †	1016680	100		As above, trace(-) fine Gravel	0.0
+12 + +	1016681	100		Olive brown, fine SAND, some Silt, little medium Sand, trace(+) coarse Sand, trace(-) fine Gravel, wet, moderately loose	0.0
	1016705	100	-,	As above	0.0
16				Bottom of boring at 15.0'	0.0
20					
-24					
Comments	: Boreho	le backfi	lled with be	entonite chips upon completion.	

Project: Contractor Storage Area LEA Comm No: 68TR664 Client: Pratt & Whitney East Hartford Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro core

Groundwater Observations:

Depth: N/M Depth: Hours **Start Date** 8/7/96 **End Date** 8/7/96

Boring ID SA-SB-23

Logged By: L. Bianchi

Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation:

Depth:		At:	Hours	₩ Easting:	
	San	opie Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ļ°	1016715	100		Reddish brown, medium SAND, with fine Sand, some coarse Sand, little fine Gravel, trace Silt, moist, loose	0.0
‡	1016716	100		Yellowish brown, medium SAND, some fine Sand, trace(-) coarse Sand, moist, loose	0.1
+4	1016717	100		As above, wet ≈ 5.5-6.0'	0.0
-	1016718	100		As above	0.0
-8	1016719 1016720	100		Dark yellowish brown, fine to medium SAND, some Silt, little coarse Sand, trace fine Gravel, wet, loose	0.2
†	1016721	100		As above	0.1
12	1016722	100		Dark reddish yellow, fine to medium SAND, with Silt, some coarse Sand, little fine Gravel, wet, loose	0.0
1	1016723	100		As above	0.0
16				Bottom of boring at 15.0'	
20				•	
-24					
+]

Project: Contractor Storage Area LEA Comm No: 68TR664
Client: Pratt & Whitney East Hartford LEA Comm No: Location: East Hartford, CT **Drilling Contractor: Drilling Method:** Geoprobe Sampling Method: Macro core **Groundwater Observations:** Depth: N/M Hours At:

Start Date 8/7/96 End Date 8/7/96

Boring ID

SA-SB-24

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation:

J. Sweeton

Depth:		At: At:	Hours Hours	Northing: Easting:	
	San	nple Informati	00	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
°	1016724	100		Reddish brown, medium SAND, with fine Sand, some coarse Sand, trace(+) Silt, trace(-) fine Gravel, moist, loose	0.1
‡	1016725	100		Yellowish brown, medium SAND, with fine Sand, some coarse Sand, little Silt, moist, loose	0.3
+4	1016726	100		As above, wet ≈ 5.5' to 6.0'	0.1
+	1016727	100		As above	0.0
‡8 ‡	1016728	100		As above	0.0
† †	1016729	100		As above	0.1
12	1016730	100		Dark reddish yellow, medium to coarse SAND, little fine Sand, trace Silt, wet, very loose	0.1
Ī	1016731	100		As above	0.1
+16				Bottom of boring at 15.0'	
-20)				
+ 24					
1					



Project: Contractor Storage Area Start Date Boring ID LEA Comm No: 68TR664 8/7/96 Client: Pratt & Whitney East Hartford Location: East Hartford, CT **End Date SA-SB-25** 8/7/96 Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: **Drilling Contractor:** LEA Drilling Method: Sampling Method: Geoprobe J. Sweeton Macro core Groundwater Observations: Depth: N/M At: Northing: Hours Depth: At: Hours Easting:

				F Casting.	
	San	ple Informs	ition	Sample Description	_
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T°	1016732	100		Yellowish olive brown, fine SAND, some Silt, moist, slightly loose	0.0
<u> </u>	1016733	100		As above	0.1
+4	1016734	100		As above	0.1
† † †	1016735	100		As above, wet ≈ 5.5'-6.0'	0.0
+ 8 +	1016736	100		As above	0.0
‡	1016737	100		As above	0.0
12	1016738	50		Dark red, medium to coarse SAND, little fine Sand, trace(-) Silt, wet, very loose	0.0
‡	1016739	50		As above	0.0
16				Bottom of boring at 15.0'	
20					
24					
‡					

Start Date Project: Contractor Storage Area LEA Comm No: 68TR664 Client: Pratt & Whitney East Hartford

Hours

Hours

Location: East Hartford, CT 8/8/96 **Drilling Contractor:** Geoprobe

Drilling Method: Sampling Method: Macro core **Groundwater Observations:**

Depth: N/M Depth: At:

8/8/96 **End Date**

Boring ID

SA-SB-26

Logged By: L. Bianchi
Drilling Foreman: J. Swo
Drill Rig: Geoprobe 5400 J. Sweeton

Surface Elevation:

Northing: Easting:

Depui.		<u> </u>	пошз	Easting.	
	San	nple Informa	ntion	Sample Description]
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
0	1016674			Dark reddish brown, medium SAND, with fine Sand, some coarse Sand, trace Silt, moist, loose	0.0
‡ <u>‡</u>	10016688			Yellowish brown, fine to medium SAND, trace Silt, moist, loose	0.0
+4	1016689			As above, wet at 5.5' to 6.0'	0.0
‡ ‡ †	1016690			As above	0.2
+8 +	1016691			Brown, medium to coarse SAND, with fine Sand, trace Silt, wet, loose	0.1
Ī	1016692			As above	0.0
12	1016693			Brown, fine to medium SAND, with Silt, wet, slightly loose	0.0
‡	1016694			As above	0.0
† 16 				Bottom of boring at 15.0'	
+ + 20					
-24					
Comment	s: Boreho	ole backf	illed with be	entonite chips upon completion.	

Comments:

Borehole backfilled with bentonite chips upon completion.



Printed On: 1/21/1998

Project: Contractor Storage Area **Start Date Boring ID** LEA Comm No: 68TR664
Client: Pratt & Whitney East Hartford
Location: East Hartford, CT 8/8/96 **End Date SA-SB-27** 8/8/96 Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: **Drilling Contractor:** J. Sweeton Drilling Method: Geoprobe Sampling Method: Macro core **Groundwater Observations:** Depth: N/M Hours Northing: Depth: At: Hours Easting:

рерш:					
i	Saun	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1016741	100		6": Dark reddish brown, medium SAND, with fine Sand, some coarse Sand, trace Silt, trace(-) fine Gravel, moist, loose; 17": Light yellowish red, fine to medium SAND, trace Silt, moist, loose	0.0
+ •	1016742	100		As above	0.0
+4	1016743 1016744	100		Yellowish brown, fine SAND, little medium Sand, trace Silt, moist, loose; wet at ≈ 5.5-6.0'	0.0 0.0
+	1016669	100		Dark brown, medium to coarse SAND, with fine Sand, little Silt, trace fine Gravel, wet, loose	0.0
+8	1016670	50		As above	0.6
+ + +	1016671	50		Yellowish brown, fine to medium SAND, some Silt, wet, loose	0.2
12	1016672	100		Olive grey, fine SAND and medium SAND, some coarse Sand, little Silt, trace fine Gravel, wet, loose	0.0
†	1016673	100		Olive grey, fine SAND and SILT, wet, slightly stiff NOTE: Olive grey, CLAY found in tip of cutting shoe at 16.0'	0.0
16				Bottom of boring at 15.0'	y
20				•	
24					
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				1-601011	
Project:	Tank Traile		Area	Start Date Boring ID)
LEA Comm	n No: 68 ratt & Whit	VC610		17/03/04	
Location:	East Hart	ford, CT		11/05/96 SA-SB-28	8
Drilling Co Drilling Me Sampling N Groundwar Depth: N	ethod: G Method: ter Observa	LEA ieoprobe Macro C tions: At:	ore Hours	Logged By: L. Bianchi Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing:	
Depth:		At:	Hours	Easting:	
 -	San	nple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1021159	100		2": Asphalt; 8": Dark brown, medium SAND, with fine Sand, little Silt, moist, loose; 3": Dark red, medium SAND, little fine Sand, moist, loose; 10": Very pale brown, fine	0.0
T	1021160 1021161	100		to medium SAND, trace Silt, moist, loose As Above	0.0
+4	1021162	100		Yellowish brown, medium SAND, some fine Sand, trace Silt, moist, loose	0.0
‡ ‡	1021163	100		As Above	0.0
+8	1021164	100		Strong brown, medium to coarse SAND, little fine Gravel, trace fine Sand, wet, loose	0.0
‡	1021165	100		As Above .	0.0
+12	1021166	100		As Above	0.5
İ	1021167	100		Strong brown, fine to medium SAND, some Silt, wet, loose	0.0
16				Bottom of Boring at 15.0'	
20					
-24					
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· +					

Printed On: 1/21/1998

Project: **Tank Trailer Storage Area** art Date Boring ID LEA Comm No: 68VC610 17/06/96 End Date Client: Pratt & Whitney East Hartford **SA-SB-29** Location: East Hartford, CT 11/06/96 L. Bianchi **Drilling Contractor:** LEA Logged By: Drilling Foreman: J. Sw. Drill Rig: Geoprobe 5400 Drilling Method: J. Sweeton Geoprobe Sampling Method: Macro Core Surface Elevation: **Groundwater Observations:** Depth: NM Hours Northing: At: Depth: At: Hours Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows /6° Sample No. Moisture, Sorting, Sphericity, Angularity, rcover (%) (ppm) Sedimentary Structures, Density, Cohesiveness 100 1021041 3": Fine to coarse GRAVEL augered; 4":Dark red, medium 0.1 SAND, with fine Sand, little Silt, trace(+) coarse Sand, trace(-) fine Gravel, moist, slightly dense; 16": Strong brown, medium Sand, some fine Sand, little Silt, trace 1021042 1021043 100 0.2 coarse Sand, moist, loose As Above 1021044 100 0.1 Brown, medium SAND, some fine Sand, little coarse Sand, trace fine Gravel, moist, loose 100 1021045 0.3 As Above 1021046 100 0.2 Brown, fine SAND, some Silt, little medium Sand, trace(-) coarse Sand, wet, loose 1021047 100 0.0 As Above 2 1021048 25 0.0 Brown, medium to coarse Sand, little fine Sand, trace(+) fine Gravel, trace(-) Silt, wet, loose 1021049 0.0 As Above Bottom of Boring at 15.0' 16 20 Borehole backfilled with bentonite chips upon completion. Comments:

LEÀ Com	ratt & White East Harti Intractor: Ethod: G	VC610 ney		Start Date 11/06/96 Ind Date 11/06/96 SA-SB-3 Logged By: L. Bianchi Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400	0
Groundwat Depth: Ni Depth:	ter Observat M A		Hours Hours	Surface Elevation: Northing:	
	Sam	ple Informat	lon	Sample Description	Τ
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
‡°	1021050	100		4": Black, fine to medium SAND, some Silt, moist, loose; 3": Dark red, fine to medium SAND, some Silt, moist, loose; 7": Yellowish brown, fine SAND, some Silt, trace medium	0.2
1	1021051	100		Sand, moist, loose; 9": Black, fine SAND and SILT, trace medium Sand, moist, slightly stiff, organic 12": As Above; 11": Yellowish brown, fine SAND, some	0.0
+4	1021052	100		Silt, trace medium Sand, moist, loose Yellowish brown, fine to medium SAND, trace Silt, moist, loose	0.1
<u> </u>	1021053	100		As Above	0.8
-8	1021054	100		As Above, wet	0.2
Ī	1021055	100		As Above	0.2
12	1021056	50		Yellowish brown, medium to coarse SAND, some fine Sand, trace(+) Silt, trace(-) fine Gravel, wet, loose	0.1
<u> </u>	1021057	50		As Above	1.3
+ 16 + + + +				Bottom of Boring at 15.0'	
20					
24					
Comments	: Borehol	le backfill	led with b	entonite chips upon completion.	<u> </u>

Tank Trailer Storage Area nm No: 68VC610 Project: LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT LEA

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core

Hours

Groundwater Observations:

Depth: NM Depth: At: At:

Start Date 11/06/96 **End Date** 11/06/96

Boring ID **SA-SB-31**

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

Depth:		At:	Hours	Fasting:	
	Sari	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
10	1021058	100		Strong brown, fine SAND, with Silt, trace medium Sand, moist, loose	0.1
‡	1021059	100		As Above	0.1
14	1021060	100		6": As Above; 17": Brown, fine SAND and SILT, trace medium Sand, moist, slightly stiff	0.1
†	1021061	100		As Above; layer of concrete pieces from 7.75-8.0'	0.1
	1021062	50		Dark brown, fine to medium SAND, some Silt, little coarse Sand, trace fine Gravel, wet, loose, brick fragments	0.1
† †	1021063	50		Dark brown, fine SAND and SILT, little medium Sand, wet, loose	9.5
12	1021064	75		Olive brown, fine SAND and medium SAND, little Silt, trace coarse Sand, wet, loose	0.8
ŧ	1021066	75		Olive grey, fine SAND, some Silt, wet, loose	6.0
† -16				Bottom of Boring at 15.0'	
20					
24					
ł					

GEOLOGIC BORING LOG Page 1 of 1 Start Date Project: Tank Trailer Storage Area Boring ID 11/07/96 LEA Comm No: 68VC610 **End Date** Client: Pratt & Whitney SA-SB-32 Location: East Hartford, CT 11/07/96 Logged By: **Drilling Contractor: LEA** L. Bianchi Drilling Method: Drilling Foreman: Geoprobe J. Sweeton Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Groundwater Observations: Surface Elevation: Depth: NM Hours Northing: At: Hours Easting: Depth: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Recover (と) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1021068 100 0.2 8": Reddish brown, medium SAND, some fine Sand, trace(+) fine Gravel, moist, loose, 15": Yellowish brown, fine SAND, some Silt, little medium Sand, moist, loose 100 1021069 0.3 As Above 1021070 100 2.0 6": As Above; 4": Black, fine to medium SAND, little Silt, moist, loose; 13": Strong brown, fine to medium SAND, some Silt, moist, loose 1021071 100 0.2 As Above 1021072 100 2.5

As Above, trace fine Gravel 1021073 100 0.4 Strong brown, fine to medium SAND, little Silt, trace coarse Sand, wet, loose 12 1021074 100 As Above 0.6 0.5 1021075 Light olive brown, medium SAND, with fine Sand, trace(+) Silt, trace(-) coarse Sand, wet, loose Bottom of Boring at 15.0' 16 20

Comments:

Borehole backfilled with bentonite chips upon completion.

Start Date **Project:** Tank Trailer Storage Area **Boring ID** 68VC610 LEA Comm No: 11/07/96 Client: Pratt & Whitney **End Date SA-SB-33** Location: East Hartford, CT 11*/*07/96 Logged By: **Drilling Contractor:** LEA L. Bianchi Drilling Method: Geoprobe Drilling Foreman: J. Sweeton Drill Rig: Geopr Surface Elevation: Geoprobe 5400 Sampling Method: Macro Core Groundwater Observations: Depth: NM Hours Northing: At: Hours Depth: At: **Easting:** Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1021076 1021077 0.0 100 4": Dark reddish brown, fine to medium SAND, little Silt, moist, loose; 19": Yellowish brown, fine SAND, little medium Sand, trace(+) Silt, moist, loose 1021078 100 0.0 As Above 0.0 1021079 100 Strong brown, fine SAND and SILT, trace(-) medium Sand, moist, loose 1021080 100 0.0 Dark yellowish brown, fine to medium SAND, some Silt, little coarse Sand, very moist, loose 1021081 50 0.0 Strong brown, medium SAND, with fine Sand, some coarse Sand, little Silt, trace coarse Gravel, wet, loose 1021082 50 0.0 As Above 12 1021083 50 0.0 As Above Printed 0.0 1021084 50 Strong brown, medium to coarse SAND, little fine Sand, trace(+) Silt, trace(-) fine Gravel, wet, loose On: 1/21/1998 Bottom of Boring at 15.0' 16

Comments:

24

20

Borehole backfilled with bentonite chips upon completion.



Boring

Project: Tank Trailer Storage Area LEA Comm No: 68VC610 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** Geoprobe Sampling Method: Macro Core

Groundwater Observations:
Depth: NM At:
Depth: At:

Hours

Start Date 11/07/96 End Date 11/07/96

Boring ID

SA-SB-34

L. Bianchi

Logged By: L. B Drilling Foreman: J. Sweeton

Drill Rig: Geopr Surface Elevation: Geoprobe 5400

Depth:	At: Hours		Hours	Easting:		
	San	nple Informa	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm	
10	1021085	100		6": Dark reddish brown, medium SAND and fine SAND, little Silt, moist, loose; 17": Dark yellowish brown, fine SAND, some Silt, little medium Sand, moist, loose	0.0	
‡	1021086	100		As Above	0.0	
+4	1021087	100		Light yellowish brown, fine SAND, some Silt, trace medium Sand, moist, loose	1.0	
‡	1021088	100		As Above	0.0	
+8	1021089	100		Brown, fine to medium SAND, some Silt, wet, loose	0.8	
‡	1021090	100		Dark yellowish brown, medium SAND, with coarse Sand, some fine Sand, little fine Gravel, trace Silt, wet, loose	0.7	
-12	1021091	100		17": As Above; 6": Dark yellowish brown, fine to medium SAND, little Silt, trace coarse Sand	0.7	
‡	1021092	100		As Above	0.6	
16				Bottom of Boring at 15.0'		
20						
24						
Comments	: Boreho	ole backf	illed with be	entonite chips upon completion.		



Sampling Method:

Groundwater Observations:

Geoprobe

Macro Core

Project: Tank Trailer Storage Area Start Date 11/07/96 End Date 68VC610 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method:

11/07/96

Boring ID SA-SB-35

Logged By: L. Bianchi
Drilling Foreman: J. Swo
Drill Rig: Geoprobe 5400 J. Sweeton

Surface Elevation:

Groundwate Depth; NA Depth:	A A	uons: At: At:	Hours Hours	Surface Elevation: Northing: Easting:	
	San	ple Informat	ion	Sample Description	Ι
Glevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T ^o	1021093	100		8": Dark reddish brown, fine to medium SAND, some Silt, moist, loose; 15": Yellowish brown, fine to medium SAND, some Silt, moist, loose	0.0
	1021094	100		As Above	0.2
4	1021095	100		As Above	0.1
†	1021096	100		As Above	0.0
8	1021097	100		Brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, wet, loose	0.0
† †	1021098	100		As Above	0.9
12	1021099	100		18": As Above; 5": Brown, fine SAND and SILT, wet, slightly stiff	0.0
Ŧ	1021100	100		As Above	0.0
16				Bottom of Boring at 15.0'	
20					
‡					
24					
†	· 		led with be		

Boring ID

SA-SB-36

J. Sweeton

Project: Add. Invest. Fire Training Area 'B'
LEA Comm No: 68VC623 Start Date 11/18/96 Client: Pratt & Whitney East Hartford **End Date** Location: East Hartford, CT 11/18/96 **Drilling Contractor:** Logged By: L. Bianchi Drilling Foreman: Geoprobe Drilling Method: Sampling Method: Macro Core Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Depth: NM Hours Northing: Hours Easting: Depth: At:

Deptil.		nple Informat	lan	Sample Description	
	525	erbes terrocers	300		1
Elevation/ Depth	Sample No.	Recovery (2)	Blews /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ļ°	1022416	100		6": Black, fine SAND, with Silt, moist, loose, organic, root fragments, riprap; 17": Strong brown, fine SAND, some Silt, moist, loose	0
†	1022417	100		As Above	0
+4	1022418	100		As Above	0
	1022419 1022420	100		Pale brown, medium SAND, some fine Sand, little coarse Sand, trace fine Gravel, wet, loose	1.0 1.5
-8	1022421	50		As Above	0
+	1022422	50	·	As Above	0
12	1022423	50		As Above	0.5
† † †	1022424	50		3": As Above; 3": Strong brown, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, loose	0.0
16				Bottom of Boring at 15.0'	
20					
-24					
Comments	: Boreho	le backfil	led with he	entonite chips upon completion.	

Printed On: 1/20/1998

Project: Add. Invest. Fire Training Area 'B'
LEA Comm No: 68VC623 Client: Pratt & Whitney East Hartford Location: East Hartford, CT **Drilling Contractor:** LEA **Drilling Method:** Geoprobe Macro Core Sampling Method: Groundwater Observations: Hours Depth: NM At:

Start Date 11/18/96 **End Date** 11/18/96

Boring ID **SA-SB-37**

Logged By: L. Bianchi Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 J. Sweeton

Surface Elevation: Northing: Easting:

Elevation/ Depth		nple Informa	tion	Sample Description	
	Sample				
	Sample No.	Recovery (X)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ľ	1022425	100		Black, fine SAND and SILT, moist, loose, root fragments	0.0
‡	1022426	100		12": As Above; 11": Strong brown, fine SAND and SILT, moist, loose	0
+4	1022427	100		As Above	0.1
‡	1022428	100	`	Light yellowish brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, loose	0
+8	1022429	100		As Above	0
‡	1022430	100		Yellowish brown, fine to medium SAND, some coarse Sand, little fine Gravel, trace Silt, wet, loose	0
+12	1022431	50		Yellowish brown, fine SAND, little medium Sand, trace Silt, wet, loose	0
‡	1022432	50		Strong brown, fine SAND, little medium Sand, trace Silt, wet, loose	0
16				Bottom of Boring at 15.0'	
-20					
24				·	
‡		:			.
Comment	s: Boreho	ele backfi	illed with be	entonite chips upon completion.	*

Project: Add. Invest. Fire Training Area 'B' LEA Comm No: 68VC623 Client: Pratt & Whitney East Hartford Location: East Hartford, CT Drilling Contractor: LEADrilling Method: Geopro Sampling Method: Macro Groundwater Observations: Depth: NM At: LEA Geoprobe Macro Core Hours Depth: Hours At:

Start Date 11/19/96 **End Date** 11/19/96

Boring ID

SA-SB-38

Logged By: L. Bi Drilling Foreman: L. Bianchi J. Sweeton Drill Rig: Geopre Surface Elevation: Northing: Geoprobe 5400

Easting:

Sample No. 1022435 1022436 1022437	Recovery (x)	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 18": Dark brown, fine SAND, some Silt, little medium Sand, moist, loose, root fragments; 5": Concrete rubble Yellowish red, fine SAND, little Silt, trace medium Sand,	(ppm) 0.0
1022435 1022436 1022437	100	Blows /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 18": Dark brown, fine SAND, some Silt, little medium Sand, moist, loose, root fragments; 5": Concrete rubble	
1022436 1022437	100		moist, loose, root fragments; 5": Concrete rubble	0.0
1022437			Yellowish red. fine SAND, little Silt, trace medium Sand	
1022438	100		moist, loose	0.0
			Light yellowish brown, fine SAND, with medium Sand, some Silt, little coarse Sand, wet, loose	0.2
1022439	100		As Above	0.0
1022440	100		As Above	0.8
1022441	100		Strong brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, loose	0.2
1022442	100		Pale brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, loose	0.6
1022443	100		Strong brown, fine to medium SAND, some coarse Sand, little Silt, wet, loose	0.0
			Bottom of Boring at 15.0'	
	1022441 1022442 1022443	1022440 100 1022441 100 1022442 100 1022443 100	1022440 100 1022441 100 1022442 100 1022443 100	1022440 100 As Above Strong brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, loose 1022442 100 Pale brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, loose 1022443 100 Strong brown, fine to medium SAND, some coarse Sand, little Silt, wet, loose

Printed On: 1/20/1998

Project: Add. Invest. Fire Training Area 'B' LEA Comm No: 68VC623 Client: Pratt & Whitney East Hartford Location: East Hartford, CT LEA **Drilling Contractor:** Drilling Method: Sampling Method: Geoprobe Macro Core **Groundwater Observations:** Depth: NM At:

Sert Date 11/19/96 **End Date** 11/19/96

Boring ID

SA-SB-39

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Depth:	At: Hours			Easting:		
	San	apie Informa	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm	
10	1022444	100		5": Black, fine SAND and SILT, moist, loose, organic, root fragments; 18": Yellowish red, fine Sand, some Silt, little medium Sand, moist, loose	0.0	
‡	1022445	100		As Above	0.1	
1	1022446	100		Light yellowish brown, fine SAND, some medium Sand, little Silt, moist, loose	0.2	
† +	1022447	100		As Above, wet	0.0	
8	1022448	100		Light greyish brown, fine to medium SAND, little Silt, trace(+) coarse Sand, trace(-) fine Gravel, wet, loose	0.0	
‡	1022449	100		Yellowish brown, medium SAND, some coarse Sand, little fine Sand, trace(+) fine Gravel, trace(-) Silt, wet, loose	0.1	
12	1022450	100		Yellowish brown, fine SAND, some Silt, little medium Sand, trace(-) coarse Sand, wet, loose	0.0	
+	1022451	100	<u> </u>	As Above	0.0	
1 16				Bottom of Boring at 15.0'		
20						
-24						
Comments			Hand and take the	entonite chips upon completion.		

At:

Depth: NM

Northing:

Add. Invest. Fire Training Area 'B' Start Date Project: Boring ID 68VC623 11/19/96 LEA Comm No: Client: Pratt & Whitney **End Date SA-SB-40** East Hartford, CT Location: 11/19/96 Logged By: **Drilling Contractor:** LEA L. Bianchi Drilling Method: Geoprobe Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Sampling Method: Macro Core Surface Elevation: Groundwater Observations:

Hours

Hours Depth: At: Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1022452 100 0.0 8": Black, fine SAND and SILT, moist, loose, organic, root fragments; 15": Brown, fine SAND, some Silt, little medium Sand, moist, loose 1022453 100 0.2 As Above 1022454 50 Yellowish brown, medium SAND, with fine Sand, little 0.1 coarse Sand, trace Silt, moist, loose 1022455 50 0.1 Yellowish brown, medium SAND, little fine Sand, trace(+) Silt, trace(-) coarse Sand, wet, loose 1022456 100 0.0 As Above 1022457 100 6": As Above; 17": Dark yellowish red, fine to medium SAND, some Silt, little coarse Sand, trace fine Gravel, wet, 0.0 loose 1022458 100 15": Greyish brown, fine to medium SAND, some coarse 0.0 Sand, trace Silt, wet, loose; 8": Yellowish red, medium SAND, some fine Sand, little coarse Sand, trace(+) Silt, trace(-) fine Gravel, wet, loose Printed On: 1/21/1998 1022459 100 0.0 As Above Bottom of Boring at 15.0' 16 20

Comments:

24

Borehole backfilled with bentonite chips upon completion.



Project: Add. Invest. Fire Training Area 'B' LEA Comm No: 68VC623 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Macro Core Groundwater Observations:
Depth: NM At:

Start Date 11/20/96 **End Date** 11/20/96

Boring ID SA-SB-41

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation:

J. Sweeton

Depth: Depth:	NM	At: At:	Hours Hours	Northing: Easting:	
		Sample Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	e Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	102244	82 100		4": Black, fine SAND and SILT, moist, loose, root fragments, organic; 19": Brown, fine SAND, with Silt, little medium Sand, moist, loose	0.1
‡	10224 10224	63 64		12": Reddish brown, fine to medium SAND, little Silt, trace coarse Sand, moist, loose; 11": Light yellowish brown, fine SAND, some medium Sand, little Silt, moist, loose	0.0
+4	10224	65 100		Yellowish brown, medium SAND, little fine Sand, trace(+) coarse Sand, trace(-) Silt, moist, loose	0.1
†	10224	66 100		As Above, wet	0.2
	10224	67 100		As Above	0.2
‡	10224	68 100		12": As Above; 11": Dark reddish brown/black, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, wet, loose	0.5
+12	10224	69 100		Pale yellowish brown, fine SAND, with medium Sand, some coarse Sand, little Silt, trace fine Gravel, wet, loose	0.2
‡	01224	70 100		Dark reddish yellow, fine to medium SAND, little Silt, trace coarse Sand, wet, loose	0.0
+16				Bottom of Boring at 15.0'	
20					
+ 24					
Comme	nte: Bor	ehole hackfi	illed with h	entonite chips upon completion.	

Project: Add. Invest. Fire Training Area 'B' **Start Date** Boring ID LEA Comm No: 68VC623 11/20/96 Client: Pratt & Whitney **End Date SA-SB-42** Location: East Hartford, CT 11/20/96 **Drilling Contractor: LEA** Logged By: L. Bianchi Drilling Method: Geopre Sampling Method: Maci Groundwater Observations: Geoprobe Drilling Foreman: J. Sweeton Drill Rig: Geopre Surface Elevation: Geoprobe 5400 Macro Core Depth: NM Hours Northing: Hours Easting: Depth: At:

Deptn:	A	\t:	Hours	Easting:		
	Sam	ple Informati	on	Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1022471	100		6": Black, fine SAND and SILT, moist, loose, root fragments organic; 15": Brown, fine SAND, with Silt, little medium SAND, moist, loose; 2": Reddish brown, fine to medium	0.0	
Ŧ ‡	1022472	100		SAND, little Silt, trace coarse Sand, moist, loose 10": As Above; 13": Light yellowish brown, fine to medium SAND, little Silt, trace coarse Sand, moist, loose	0.0	
†4 †	1022473	50		As Above, concrete rubble	0.3	
+	1022474	50		As Above, wet	0.0	
***************************************	1022475	100		Dark yellowish brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, wet, loose	0.5	
+	1022476	100		18": As Above; 5": Dark reddish brown/black, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, wet, loose	0.0	
+12	1022477	100		Dark yellowish brown, medium SAND, with fine Sand, some coarse Sand, with Silt, trace fine Gravel, wet, loose	1.3	
‡	1022478	100		As Above	0.1	
16				Bottom of Boring at 15.0'		
20						
-24						
Comments				entonite chips upon completion.		

Page 1 of 1 Add. Invest. Fire Training Area 'B' Start Date Project: Boring ID 11/20/96 LEA Comm No: 68VC623 Client: Pratt & Whitney East Hartford **End Date SA-SB-43** 11/20/96 Location: East Hartford, CT Logged By: L. Bianchi Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 **Drilling Contractor:** LEA Drilling Method: Geoprobe J. Sweeton Sampling Method: Macro Core Surface Elevation: Groundwater Observations: Depth: NM Depth: At: Hours Northing: Easting: Hours At.

Depth:	At: Hours			* Kasting:		
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1022479	100		Brown, fine SAND, with Silt, moist, loose, root fragments	0.0	
‡	1022480	100		10": As Above; 13": Yellowish brown, fine to medium SAND, little Silt, trace coarse Sand, moist, loose	0.0	
+4	1022481	100		As Above	0.0	
Ĭ	1022482	100		Dark yellowish brown, fine to medium SAND, little Silt, trace(+) coarse Sand, wet, loose	0.0	
8	1022483	50		As Above	0.1	
† †	1022484	50		8": As Above; 4": Dark reddish brown/black, medium to coarse SAND, some fine Sand, little Silt, wet, loose	0.0	
12	1022485	100		Dark yellowish brown, medium SAND with fine Sand, some coarse Sand, little Silt, trace fine Gravel, wet, loose	0.0	
‡	1022486	100		As Above	0.0	
16 17				Bottom of Boring at 15.0'		
20				·		
-24						
Ť		1 1	ļ		Į	

Borehole backfilled with bentonite chips upon completion. Comments:

Project: Add. LEA Comm No: Add. Invest. Fire Training Area 'B' Start Date **Boring ID** 11/20/96 68VC623 Client: Pratt & Whitney East Hartford **End Date** SA-SB-44 Location: East Hartford, CT 11/20/96 Drilling Contractor: Drilling Method: Logged By: L. B Drilling Foreman: LEA L. Bianchi J. Sweeton Geoprobe Sampling Method: Macro Core Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Depth: NM Hours Northing: At: Depth: Hours At: Easting: Sample Information Sample Description

Elevation/ Depth	Sample No.	Recovery (と)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
+	1022487	100		5": Dark brown, fine SAND and SILT, moist, loose, root fragments, organic; 18": Brown, fine SAND, some Silt, little medium Sand, moist, loose	0.0
1	1022488	100		As Above	0.0
4	1022489	50		As Above	0.0
1	1022490	50		As Above, wet	0.1
+8	1022491	100		As Above	0.7
† † †	1022492	100		15": As Above; 8": Dark reddish brown, medium SAND, some coarse Sand, little fine Sand, trace Silt, wet, loose	0.0
12	1022493	100		Strong brown, fine to medium SAND, little Silt, trace coarse Sand, wet, loose	0.9
	1022494	100		As Above	0.1
16				Bottom of Boring at 15.0'	
20					
24					
Comments	: Boreho	le backfi	lled with be	entonite chips upon completion.	<u> </u>

Printed On: 1/20/1998

Project: Add. Invest. Fire Training Area 'B' LEA Comm No: 68VC623 Client: Pratt & Whitney East Hartford Location: East Hartford, CT **Drilling Contractor:**

Hours

Hours

Drilling Method: Geoprobe Sampling Method: Macro Core **Groundwater Observations:**

Depth: NM At: Depth: At:

Start Date 11/21/96 **End Date** 11/21/96

Boring ID

SA-SB-45

Logged By: L. Bianchi
Drilling Foreman: J. Swo
Drill Rig: Geoprobe 5400 J. Sweeton

Surface Elevation:

Northing: Easting:

ъфш.		1t.	Hours	+ A resette.	
	Sample Information			Sample Description	4
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
10	1022497	100		18": Brown, fine SAND and SILT, little medium Sand, moist loose, some root fragments; 5": Strong brown, fine SAND, little Silt, trace medium Sand, moist, loose	, 0.0
‡	1022498	100		As Above	0.0
-4	1022499	100		Light yellowish brown, fine to medium SAND, some Silt, moist, loose	2.5
- +	1022500	100		As Above, wet at ≈7.0'	0.0
+8 +	1022501	100		As Above	0.1
†	1022502	100		Dark reddish yellow, fine to medium SAND, some Silt, little coarse Sand, trace fine Gravel, wet, loose	0.2
12	1022503	100		As Above	2.3
†	1022504	100	_	As Above	0.0
16				Bottom of Boring at 15.0'	
20			ļ		
‡				·	
24					
Comments	Possit s	la be dett	lad with b	entonite chips upon completion.	<u> </u>

Printed On: 1/20/1998

LEĂ Com	m No: 68 ratt & Whit East Hart	VC623 mey East	aining Area Hartford	.в.	Start Date 11/21/96 End Date 11/21/96 Logged By: L. E	Boring II SA-SB-4	
Drilling M Sampling l	ethod: G Method: ter Observa IM A	ieoprobe Macro C	Core Hours Hours	₽ ·	Drilling Foreman: Drill Rig: Geop Surface Elevation: Northing: Easting:	J. Sweeton robe 5400	
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Moisture, S	Sample Description Grain Size, Secondary Grorting, Sphericity, Angula Structures, Density, Coher	arity,	(ppm)
0	1022505	100			nd SILT, trace medium S		0.0
‡	1022506	100		6": As Above; 17": L SAND, little Silt, trace	ight yellowish brown, f e coarse Gravel, moist,	ine to medium loose	0.0
+4	1022507	50		As Above, very mois	t		0,0
‡	1022508	50		Yellowish brown, me little Silt, trace fine G	dium to coarse SAND, ravel, wet, loose	with fine Sand,	0.2
+8 +	1022509 1022510	100		Olive brown, fine SA	ND, with Silt, wet, loos	e	0.1
† 	1022511	100		As Above			0.0
+12	1022512	100		As Above			0.0
Ŧ	1022513	100		Reddish brown, fine	SAND, with Silt, wet, k	ose	0.0
16				Bottom of Boring at 1	15.0'		
-24				·			
Comment		l backfi grey, varv	lled with be red CLAY, t	entonite chips upon cor race Silt, wet, stiff at	mpletion. 15.5'		1



Add. Invest. Fire Training Area 'B' nm No: 68VC623 Project: LEA Comm No: Client: Pratt & Whitney East Hartford

Location: East Hartford, CT

Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Depth: NM Hours At: Depth: At: Hours

Start Date 11/25/96 End Date 11/25/96

Boring ID

SA-SB-47

Logged By: L. Bianchi Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 J. Sweeton

Surface Elevation: Northing: Easting:

nebru:		v:	TOUR	Y Easting:		
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness		
10	1022516	100		1": Dark brown, fine SAND and SILT, moist, loose, root fragments, organic; 22": Yellowish brown, fine SAND and SILT, moist, loose, root fragments	2.0	
†	1022517	100		Light yellowish brown, fine SAND, some medium Sand, little Silt, moist, loose	2.5	
+4	1022518	50		Greyish brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, wet at ≈5.0', loose	3.0	
† †	1022519	50		6": Black medium SAND, with fine Sand, trace(-) Silt, wet, loose, hydrocarbon odor; 6": Olive brown, fine SAND, little Silt, trace medium Sand, wet, loose	5.5	
-8	1022520	50		As Above	30	
†	1022521	50		As Above	2.5	
† 12 †	1022522	75		10": Dark red, medium SAND, some fine Sand, little coarse Sand, little Silt, wet, loose; 8": Olive grey, varved CLAY, trace Silt, wet, loose	2.0	
†	1022523	75		As Above	4.0	
16				Bottom of Boring at 15.0'		
+ -20 +						
† † †						
24			1			
Comments	: Boreho	le backfi	lled with be	entonite chips upon completion.		

Project: Add. Invest, Fire T LEA Comm No: 68VC623 Add. Invest, Fire Training Area 'B' Start Date Boring ID 11/25/96 Client: Pratt & Whitney East Hartford **End Date SA-SB-48** Location: East Hartford, CT 11/25/96 L. Bianchi **Drilling Contractor:** Logged By: Drilling Foreman: Drilling Method: Geoprobe J. Sweeton Drill Rig: Geopr Surface Elevation: Geoprobe 5400 Sampling Method: Macro Core **Groundwater Observations:** Depth: NM Depth: Northing: Hours At: Easting: Hours At:

Dopta.	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1022524	100		Yellowish brown, fine SAND and SILT, moist, loose, root fragments	0.0	
† † †	1022525 1022526	100		Light yellowish brown, fine SAND, some medium Sand, little Silt, moist, loose	0.5	
1	1022527	50	·····	Yellowish brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, moist, loose	0.0	
†	1022528	50		Light olive brown, fine to medium SAND, some coarse Sand, little Silt, wet, loose	0.0	
+8 + +	1022529	100	_	Olive brown, fine SAND, with Silt, wet, loose	2.0	
‡	1022530	100		6": As Above; 17": Dark yellowish brown, fine SAND, little Silt, trace medium Sand, wet, loose	1.0	
+12 +	1022531	100 .		18": Light olive brown, fine SAND, little Silt, wet, loose; 5": Red, medium SAND, some fine Sand, little Silt, trace coarse Sand, wet, loose	0.0	
‡	1022532	100		As Above	1	
+ + 16 + + +				Bottom of Boring at 15.1*		
20				·		
-24						
Comments	• Borebo	le backfi	lled with he	entonite chips upon completion.	1	

Comments:

Borehole backfilled with bentonite chips upon completion. * Olive grey, varved CLAY, trace Silt, wet, stiff at 15.5'.



Printed On: 1/20/1998

Project: Add. Invest. Fire Training Area 'B'
LEA Comm No: 68VC623

Client: Pratt & Whitney East Hartford

Location: East Hartford, CT LEA

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe **Macro Core**

Groundwater Observations: Depth: NM At: Hours Depth: At: Hours **Start Date** 11/25/96 **End Date** 11/25/96

Boring ID

SA-SB-49

Logged By: L. Bianchi

Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 J. Sweeton

Surface Elevation: Northing:

Easting:

рерии:		Att	пошя	÷ Casung:		
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	covery Blows (2) /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness		
T°	1022533	100		Yellowish brown, fine SAND and SILT, moist, loose, processed stone, slag, coal fragments	0.0	
‡	1022534	100		Light yellowish brown, fine SAND, some medium Sand, little Silt, moist, loose	0.0	
+4	1022535	100		Greyish brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, wet at ≈5.0', loose	•	
‡ ‡	1022536	100		5": Black, medium SAND with fine Sand, trace(-) Silt, wet, loose; 18": Olive brown, fine SAND, little Silt, trace medium Sand, wet, loose	2.0	
+8	1022537	100		Dark grey, medium SAND and fine SAND, little Silt, trace coarse Sand, wet, loose	9.0	
†	1022538	100		Yellowish brown, fine SAND, some Silt, wet, loose	5.0	
1 12	1022539	100		8": As Above; 15": Red, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, loose	1.0	
‡	1022540	100		As Above	1.0	
16				Bottom of Boring at 15.0		
+ 20 +						
24						

omments:

Borehole backfilled with bentonite chips upon completion. Olive grey, varved CLAT, trace Silt, wet, stiff at 15.0'.



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Printed On: 1/20/1998

Printed On: 1/20/1998

Boring No: SA-SB-50

Add. Invest. Fire Training Area 'B' Project: Start Date Boring ID LEA Comm No: 68VC623 11/26/96 Client: Pratt & Whitney East Hartford **End Date** SA-SB-50 Location: East Hartford, CT 11/26/96 **Drilling Contractor:** Logged By: L. Bianchi Geoprobe Drilling Method: Drilling Foreman: J. Sweeton Sampling Method: **Macro Core** Drill Rig: Geoprobe 5400 Surface Elevation: **Groundwater Observations:** Depth: NM Hours Northing: At: **Easting:** Depth: At: Hours Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows (X) (X) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 0 1022543 100 Brown, fine SAND, with Silt, trace medium Sand, moist, loose, root fragments 100 1022544 3.5 Light yellowish brown, fine SAND, some Silt, trace(-) medium Sand, moist, loose 1022545 50 5.0 Greyish brown, fine to medium SAND, little Silt, trace coarse Sand, wet at ≈5.0', loose 1022546 1022547 7.5 20": Greyish brown, medium SAND, some coarse Sand, little fine Sand, trace Silt, wet, loose; 3": Black, medium SAND, little coarse Sand, little fine Sand, trace(-) Silt, wet, loose, hydrocarbon odor 1022548 100 35.0 Dark olive brown, fine to medium SAND, little coarse Sand, little Silt, wet, loose 1022549 7.0 Dark olive grey, fine SAND, some Silt, wet, loose 12 1022550 50 3.0 Grey, fine SAND, little medium Sand, trace Silt, wet, loose 1022551 50 3.5 Red, medium to coarse SAND, some fine Sand, little Silt, wet, loose Bottom of Boring at 15.0' 16 20 24 Borehole backfilled with bentonite chips upon completion. Olive grey, varved CLAY, Comments: trace Silt, wet, stiff at 15.5'.

Add. Invest. Fire Training Area 'B' Project: 68VC623 LEA Comm No: Client: Pratt & Whitney

Location: East Hartford, CT **Drilling Contractor:** LEA

Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Depth: NM At:

Hours

Start Date 11/26/96 End Date 11/26/96

Boring ID SA-SB-51

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Depth:	At: Hours		Hours	Easting:		
Elevation/ Depth	Sample Information			Sample Description		
	Sample No.	Recovery (%)	.Ve. Blomz	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm	
10	1022552	100		Brown, fine SAND, with Silt, trace medium Sand, moist, loose	1.0	
+	1022553	100		Light yellowish brown, fine SAND, some Silt, trace(-) medium Sand, moist, loose	2.0	
+4	1022554	100		Greyish brown, fine to medium SAND, little coarse Sand, little Silt, wet at ≈5.0', loose	3.0	
† †	1022555	100		15": As Above; 8": Black, medium SAND, little coarse Sand, little fine Sand, trace(-) Silt, wet, loose, hydrocarbon odor	120.	
+8	1022556	100		Dark olive brown, fine to medium SAND, little coarse Sand, little Silt, wet, loose	210.	
†	1022557	100		Dark olive grey, fine SAND, little Silt, trace medium Sand, wet, loose	2.0	
†12 †	1022558	10		Red, medium to coarse SAND, some fine Sand, little Silt, wet, loose	5.0	
+	1022559	100		Olive grey, varved CLAY, trace Silt, wet, stiff	4.0	
16				Bottom of Boring at 15.0'		
20						
-24						
Comments				entonite chips upon completion.		

Project: Add. Invest. Fire Training Area 'B'
LEA Comm No: 68VC623
Client: Pratt & Whitney East Hartford
Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM At: Hours

Start Date 11/26/96 End Date 11/26/96

Boring ID

SA-SB-52

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:

Duttace 13	×
Northing:	
Northing:	
Tion omne.	
Tarting.	
Easting:	

Depth:	At: Hours		Hours		
	Sample Information			Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1022560	100		Brown, fine SAND, with Silt, trace medium Sand, moist, loose, root fragments	4.0
‡	1022561	100		Light yellowish brown, fine SAND, some Silt, trace(-) medium Sand, moist, loose	2.0
+4	1022562	76		Olive brown, fine SAND, some medium Sand, little Silt, wet at ≈5.0', loose	1.0
†	1022563	75		As Above	1.0
8	1022564	75		Dark reddish yellow, fine to medium SAND, little Silt, trace coarse Sand, wet, loose	3.0
+	1022565	75		As Above	0.0
12	1022566	10		Olive grey, varved CLAY, trace Silt, wet, stiff	1.0
‡	1022567	100		As Above	-
+ + 16 + +				Bottom of Boring at 15.0'	
24					

Comments:

Borehole backfilled with bentonite chips upon completion.



Printed On: 1/20/1998

Add. Invest. Fire Training Area 'B' Start Date Project: Boring ID 11/27/96 LEA Comm No: 68VC623 Client: Pratt & Whitney **End Date SA-SB-53** East Hartford, CT Location: 11/27/96 Logged By: L. Bi Drilling Foreman: **Drilling Contractor:** LEA L. Bianchi Drilling Method: Geoprobe J. Sweeton Drill Rig: Geoprobe 5400 Sampling Method: Macro Core **Groundwater Observations:** Surface Elevation: Northing: Hours Depth: NM Depth: Hours Easting: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, ecover (%) (ppm) Sedimentary Structures, Density, Cohesiveness 0.0 1022570 100 Light brown, fine SAND, some Silt, trace(-) medium Sand, moist, loose 0.0 1022571 100 Light yellowish brown, fine SAND, little Silt, moist, loose 1022572 1022573 100 1.0 Light olive brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet at ≈ 5.0 ', loose 1022574 100 350.0 7": 16": Black, fine to medium SAND, little coarse Sand, trace(-) Silt, wet, loose, hydrocarbon odor 1022575 100 1.0 Light olive brown, fine to medium SAND, little Silt, wet, loose 1022576 100 0.0 As Above 12 1022877 5 As Above Printed On: 1/21/1998 1022578 Olive grey, varved CLAY, trace Silt, wet, stiff Bottom of Boring at 15.0' 16 20 24 Boring Comments: Borehole backfilled with bentonite chips upon completion.

Project: Add. Invest. Fire Training Area 'B'
LEA Comm No: 68VC623 Client: Pratt & Whitney East Hartford Location: East Hartford, CT Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macro Core Groundwater Observations: Depth: NM Hours

Start Date 12/02/96 **End Date** 2/02/96

Boring ID

SA-SB-54

Logged By: B. Tomicic
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400 J. Sweeton Surface Elevation:

Northing:

Depth:	A	\t:	Hours	Easting:	
	Sample Information			Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1022587	83		Top 6": Dark brown, medium SAND, some fine Sand, moist, topsoil; Bottom 18": Brown, fine SAND, moderately dense, moist	0.0
† † †	1022588	100		Greyish brown, coarse SAND, with medium Sand, loose, moist, poorly graded	0.0
+4	1022589	21		As Above	0.2
† † +	1022590	100		As Above	0.0
+8 +	1022591	75		As Above, wet	0.0
† †	1022592	100		Top 20": As Above; Bottom 2": Reddish brown, medium SAND, with fine Sand, loose, wet	0.0
+12	1022593	17		Grey, varved CLAY, dense, wet, hit clay at 13'	0.0
† †	1022594	100		As Above	0.0
+16 				Bottom of Boring at 16'	
24					
Comments	: Boreho	le backfi	lled with be	entonite chips upon completion.	<u> </u>

Project: Add. Invest. Fire Training Area 'B' Start Date Boring ID LEA Comm No: 68VC623 12/02/96 Client: Pratt & Whitney **End Date** SA-SB-55 Location: East Hartford, CT 12/02/96 **Drilling Contractor:** LEA **B.** Tomicic Logged By: J. Sweeton Drilling Foreman: Drilling Method: Geoprobe Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: Groundwater Observations: Depth: NM Hours Northing: At: Easting: At: Hours Depth: Sample Information Sample Description Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes. Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1022595 58 Top 4": Dark brown, fine SAND, loose, well sorted, organic 0.0 material 1022596 100 0.0 Light brown, fine SAND, moist, moderately dense, well sorted 1022597 25 0.0 Top 18": No Recovery; Bottom 6": As Above 100 1022598 0.0 Top 1': As Above; Bottom 1': Reddish brown, fine SAND, some medium Sand, wet, loose, poorly sorted 1022599 46 0.0 Top 13": No Recovery; Bottom 11": Brown, fine SAND, with medium Sand, wet, loose 1022600 100 Top 1': As Above; Bottom 1': Reddish brown, fine SAND, 0.0 with medium Sand, wet, loose 12 1022601 83 0.1 Top 1': Brownish grey, silty CLAY, trace(-) fine Sand, wet, dense, Bottom 1': Brownish grey, varved CLAY, dense 1022602 100 0.0 As Above Bottom of Boring at 16' 20 24 Borehole backfilled with bentonite chips upon completion. Comments:

Project: Add. Invest. Fire Training Area 'B' **Start Date** Boring ID 68VC623 LEA Comm No: 12/02/96 Client: Pratt & Whitney **End Date** SA-SB-56 Location: East Hartford, CT 12/02/96 LEA Logged By: B. T Drilling Foreman: **B.** Tomicic **Drilling Contractor: Drilling Method:** Geoprobe J. Sweeton Drill Rig: Geopre Surface Elevation: Sampling Method: Macro Core Geoprobe 5400 Groundwater Observations: Depth: NM At: Hours Northing: Depth: At: Hours Easting:

Depen.			22002	· Zamang.		
Elevation/ Depth	Sar	nple Informat	ion	Sample Description		
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
ް	1022603	50		Brown, fine SAND, dry, loose, organic matter	0.0	
†	1022604	100	ï	Brown, medium SAND and fine SAND, moist, moderately dense	0.0	
+4	1022605	29		As Above	0.0	
	1022606	83		Top 6": As Above; Bottom 18": Blackish red, medium SAND and fine SAND, wet, moderately dense, mottled	0.0	
- 8	1022607	38		As Above	0.0	
†	1022608	100		As Above	0.0	
12	1022609	83		Top 1': Brownish grey, silty CLAY, moist, dense; Bottom 1': Grey, varved CLAY, dense	0.0	
+	1022610	92		As Above	0.0	
16				Bottom of Boring at 16'		
20						
Comments	Boreho	ole backfil	lled with be	entonite chips upon completion.		

Boring No: SA-SB-56

Printed On: 1/21/1998

4-SB-57

Start Date Add. Invest. Contractor Storage Area Project: . Boring ID 12/03/96 68VC624 LEA Comm No: **End Date** Client: Pratt & Whitney East Hartford **SA-SB-57** 12/03/96 Location: P&W East Hartford, CT Logged By: B. T Drilling Foreman: LEA B. Tomicic **Drilling Contractor:** J. Sweeton Geoprobe Drilling Method: Drill Rig: Geoprobe 5400 Sampling Method: Macr Groundwater Observations: **Macro Core** Surface Elevation: Depth: NM Northing: Hours At: Hours Easting: At: Depth: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Moisture, Sorting, Sphericity, Angularity, Sample No. (ppm) Sedimentary Structures, Density, Cohesiveness 1022720 50 0.0 Top 2": Bituminous; Dark reddish brown, coarse SAND, some medium Sand, trace(+) fine Sand, loose, moist 100 0.0 1022721 Brown, medium SAND, with fine Sand, moist, loose 0.0 1022722 100 As Above Bottom of Boring at 6' 12 Printed On: 1/20/1998 20 24 Borehole backfilled with bentonite chips upon completion. Comments:

Project: Add. Invest. Contractor Storage Area LEA Comm No: 68VC624 Start Date Boring ID 12/03/96 Client: Pratt & Whitney East Hartford Location: P&W East Hartford, CT **End Date SA-SB-58** 12/03/96 Logged By: B. Tomicic Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 Drilling Contractor: Drilling Method: Sampling Method: Geoprobe J. Sweeton Macro Core Surface Elevation: **Groundwater Observations:** Northing: Depth: NM Hours At: Hours Depth: At: Easting:

Deptn:		AL:	Hours	₹	
	San	aple Informat	ion	Sample Description	J
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1022723	50		Top 2": Bituminous; Dark reddish brown, coarse SAND, some medium Sand, trace(+) fine Sand, moist, loose	0.0
†	1022724	100		Brown, medium SAND, with fine Sand, moist, loose	0.0
+4	1022725	67		As Above	0.0
1				Bottom of Boring at 6'	
8					
+					
12					
‡ ‡					
16				·	
20					
† † †					
24					
Comments	: Borebo	le backfil	led with he	entonite chips upon completion.	

Drilling Co Drilling Me Sampling Me Groundwar Depth: No Depth:	ethod: G Method: ter Observa M /	LEA leoprobe Macro C tions: \t: \t:	Fore Hours Hours	Logged By: B. Tomicic Drilling Foreman: J. Swo Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	eeton
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6*	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
·	1022726	60		Top 2": Bituminous; Dark reddish brown, coarse SAND some medium Sand, trace(+) fine Sand, moist, loose	, 0.0
† †	1022727	100		Brown, medium SAND, with fine Sand, moist, loose	0.0
4	1022728	83	·	As Above	0.0
				Bottom of Boring at 6'	
16					
Comments	: Roraho	ole backfi	lied with b	entonite chips upon completion.	

LEA Com	Add. Inves m No: 68 ratt & Whit P&W East	VC624 mey Eas	actor Storag t Hartford d, CT	Boring 12/03/96 End Date 2/03/96 SA-SB-	
Drilling Control Drilling M Sampling 1	ontractor: lethod: G Method: iter Observa IM	LEA ieoprobe Macro	 }	Logged By: B. Tomicic Drilling Foreman: J. Sweete Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	n
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
To	1022729	50		Top 1": Bituminous; Dark reddish brown, coarse SAND, some medium Sand, trace(-) fine Sand, moist, loose	0.0
†	1022730	100		Brown, medium SAND, some(-) fine Sand, moist, loose	0.0
- 4	1022731	75		As Above	0.0
† †				Bottom of Boring at 6'	
 8					
‡					
+ 12					
†					
16					
‡ 20					
† † †			-		
24					
Comments	s: Boreno	HO DACKT	iliea with De	ntonite chips upon completion.	

Start Date Project: Add. Invest. Contractor Storage Area **Boring ID** LEA Comm No: 68VC624 12/03/96 Client: Pratt & Whitney East Hartford **End Date SA-SB-61** P&W East Hartford, CT 12/03/96 Location: **B.** Tomicic Logged By: **Drilling Contractor:** Drilling Foreman: Drilling Method: J. Sweeton Geoprobe Sampling Method: Macro Core Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Northing: Hours Depth: NM At; Depth: Hours Easting: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows cover (X) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1022732 60 Top 2": Bituminous concrete; Bottom 10": Dark reddish 0.0 brown, coarse SAND, some medium Sand, moist, loose 0.0 1022733 100 Brown, medium SAND, some(-) fine Sand, moist, loose 1022734 0.0 As Above Bottom of Boring at 6' 12 16 20 Borehole backfilled with bentonite chips upon completion. Comments:

Orilling M Sampling l	Method: ter Observat	LEA leoprobe Macro (tions: \t:	Core Hours	Logged By: B. Tomicic Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	1
Depth:		\t:	Hours		
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1022735	58		Top 1": Bituminous concrete; Dark reddish brown, coarse SAND, some medium Sand, trace fine Sand, moist, loose	0.0
<u> </u>	1022736	100		Brown, medium SAND, some(-) fine Sand, moist, loose	0.0
+4	1022737	75		As Above	0.0
Ī				Bottom of Boring at 6'	
- - 8					
‡				·	
† + 12					
‡"					
‡			,	·	
16					
‡					
20					
Ī					
† † ;					
+24		1			

Project: Add. Invest. Contractor Storage Area LEA Comm No: 68VC624 Client: Pratt & Whitney East Hartford Location: P&W East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations:

At: Hours Depth: NM

Start Date 12/03/96 **End Date** 12/03/96

Boring ID

SA-SB-63

B. Tomicic

Logged By: B. T Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400

Surface Elevation:

Northing: Easting:

Depth:		At:	Hours	₩ Easting:	
	San	nple Informs	ition	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1022738	67		Top 1": Bituminous; Dark reddish brown, coarse SAND, some medium Sand, trace fine Sand, moist, loose	0.0
†	1022739	100		Brown, medium SAND, some(-) fine Sand, moist, loose	0.0
+4	1022740	58		As Above	0.0
†	 -			Bottom of Boring at 6'	
+8					
+12 +12	,				
16			-		
20					
-24					
1					

z

Project: Add. Invest. Contractor Storage Area Start Date Boring ID LEA Comm No: 68VC624 12/03/96 Client: Pratt & Whitney East Hartford **End Date** SA-SB-64 Location: P&W East Hartford, CT 12/03/96 **Drilling Contractor:** Logged By: **B.** Tomicic Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Drilling Foreman: Drill Rig: Geopre Surface Elevation: Geoprobe J. Sweeton Macro Core Geoprobe 5400 Depth: NM Hours At: Northing: Easting: Depth: At: Hours

	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
·	1022741	50		Top 1": Bituminous concrete; Dark reddish brown, coarse SAND, some medium Sand, trace fine Sand, moist, loose	0.0
‡	1022742	50		Brown, medium SAND, some(-) fine Sand, moist, loose	0.0
+4	1022743	33		As Above	0.0
‡				Bottom of Boring at 6'	<u> </u>
8					
‡					
12				·	
† †					
16	i				
‡					
20					
+ 24					
1					l l

Project: Add. Invest. Contractor Storage Area

LEA Comm No: 68VC624

Client: Pratt & Whitney East Hartford
Location: P&W East Hartford, CT

Start Date
12/03/96
End Date
12/03/96

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:
Depth: NM At: Hours

Depth: NM At: Hours
Depth: At: Hours

s ¥

Boring ID SA-SB-65

Logged By: B. Tomicic
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400

Surface Elevation:

|--|

ъерш.		AL.	пошз	- Dating.		1
	Sar	nple Informa	ition	Sample Description		1
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1022744	50		Top 1": Bituminous concrete; Dark reddish brown, coarse Sand, some medium Sand, trace fine Sand, moist, loose	0.0	
+ +	1022745	100		Brown, medium SAND, some(-) fine Sand, moist, loose	0.0	
1 4	1022746	67		As Above	0.0	
+ + + + + + + + + + + + + + + + + + + +				Bottom of Boring at 6'		
+8						
12						
†						7.11
16			`	·		- C
+						Luman om 1/20/1990
20						
† †						
+						
+24						
Comments	: Boreho	ole backf	illed with b	entonite chips upon completion.		201112

LEA

Project: Add. Invest. Contractor Storage Area LEA Comm No: 68VC624 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geoprobe Sampling Method: Maca Groundwater Observations: **Macro Core** Depth: NM At: Hours Depth:

Hours

At:

Start Date 12/04/96 End Date 12/04/96

Boring ID

SA-SB-66

Logged By: J. Klapheke Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 J. Sweeton Surface Elevation:

Northing: Easting:

ocpin.	·		- 110413	÷ Dasung.		
	San	nple Informa	tion	Sample Description		
Elevation/ Depth	Sample Recovery B		Blaus /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness		
l°	1022751	71		Brown to dark reddish brown, fine to medium SAND, trace coarse Sand, trace(-) Silt, moist, loose	0.0	
<u> </u>	1022752				0.0	
+ 4	1022753	63		Dark yellowish brown, fine to coarse(+) SAND, with very fine Gravel, moist to wet, loose	-	
‡	1022754				-	
+ 8 +	1022755	67		Dark reddish brown, fine to coarse SAND, trace Silt, trace fine Gravel, wet, loose	0.0	
Ī	1022756				0.0	
+ 12	1022757	62		Dark yellowish brown, fine to coarse(+) SAND, with fine Gravel, wet, loose, coarsening downwards to fine GRAVEL, with fine to coarse(+) Sand, wet, loose, angular to	0.0	
† †	1022758			subrounded	0.0	
16				Bottom of Boring at 16'		
† †						
20						
24						
T 24						



Printed On: 1/21/1998

Depth: NM

Add. Invest. Contractor Storage Area m No: 68VC624 Project: LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: LEA Geoprobe Sampling Method: Macro Core Groundwater Observations:

At:

Hours

Start Date 12/04/96 **End Date** 12/04/96

Boring ID SA-SB-67

Logged By: J. Klapheke Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 Surface Elevation: J. Sweeton

Northing:	
Easting:	

Depth:		At:	Hours	Easting:	
	San	nple Informat	tion	Sample Description	
levation/ epth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1022760 1022761 1022762	79		Dark reddish brown, fine to medium SAND, trace(-) Silt, slightly moist, loose, gradually changing to dark yellowish brown, fine to medium SAND, trace coarse Sand, moist, loose	0.0
14	1022763	69		Dark yellowish brown, fine to medium SAND, wet, loose, coarsening downward to dark yellowish brown, fine to coarse(+) SAND with fine Gravel, wet, loose	0.0
	1022765	67		Dark yellowish brown, fine to coarse(+) SAND and fine GRAVEL, wet, loose, occasional iron staining, slight	0.0
†	1022766			coarsening at tip	0.0
12	1022767	62		As Above	0.0
† † †	1022768				0.0
16				Bottom of Boring at 16'	
+ + +20					
24					
Commer	ts: Boreho	ole backfi	lled with be	entonite chips upon completion.	

Project: Add. Invest. Contractor Storage Area Start Date **Boring ID** 68VC624 LEA Comm No: 12/04/96 Client: Pratt & Whitney **End Date SA-SB-68** Location: East Hartford, CT 12/04/96 **Drilling Contractor:** LEA Logged By: J. Klapheke J. Sweeton Drilling Method: Drilling Foreman: Geoprobe Sampling Method: Drill Rig: Geoprobe 5400 Macro Core Groundwater Observations: Surface Elevation: Depth: NM Hours Northing: At: Hours Depth: **Easting:** Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1022769 79 0.0 8": Dark reddish brown, fine SAND with Silt, little fine Gravel, dense, slightly moist; 30": Dark yellowish brown, fine to medium SAND, trace coarse Sand, slightly moist, loose 1022770 0.0 1022771 0.0 As Above, coarsening downward to a dark yellowish brown, fine to coarse(+) SAND and fine GRAVEL, wet, loose, subangular 1022772 0.0 71 0.0 1022773 Dark yellowish brown, fine to coarse(+) SAND and fine GRAVEL, wet, loose 0.0 1022774 12 1022775 63 Dark yellowish brown, fine Gravel, with fine to coarse(+) Sand 1022776 Printed On: 1/21/1998 16 Bottom of Boring at 16' 20 24 Borehole backfilled with bentonite chips upon completion.

Add. Invest. Contractor Storage Area Project: LEA Comm No: 68VC624 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: LEA
Drilling Method: Geopro
Sampling Method: Macr
Groundwater Observations:
Depth: NM At: Geoprobe Macro Core Hours

Start Date 12/05/96 End Date 12/05/96

Boring ID

SA-SB-69

Logged By: J. Klapheke Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 Surface Elevation: J. Sweeton

Northing:

Depth:		At:	Hours	Easting:	
	Sar	npie Informa	tion	Sample Description	<u> </u>
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1022778 1022779 1022780	77		6": Dark reddish brown, fine to medium GRAVEL with fine to coarse Sand, trace Silt, slightly moist, loose, subrounded; 12": Reddish brown, fine(+) to medium SAND, some Silt, trace fine to medium Gravel, slightly dense, slightly moist; 19": Reddish brown to dark yellowish brown, fine to medium SAND, trace fine Gravel, trace Silt, moist, loose	0.0
+4	1022781	63		Dark yellowish brown, fine to medium SAND, trace coarse Sand, moist to wet, loose to slightly dense	0.0
†	1022782				0.0
-8	1022783	63		Dark yellowish brown, fine to coarse(+) SAND, with fine Gravel, wet, loose, subangular to subrounded	0.0
T	1022784				0.0
12	1022785	54		Dark yellowish brown, fine to coarse(+) SAND, some fine Gravel, trace Silt, wet, loose, micaceous	0.0
-	1022786				0.0
16				Bottom of Boring 16'	
20					
-24					
†					
Comment	s: Boreho	ole backfi	lled with be	entonite chips upon completion.	

Project: Add. Invest. Contractor Storage Area LEA Comm No: 68VC624 **Start Date** Boring ID 12/05/96 Client: Pratt & Whitney East Hartford **End Date SA-SB-70** Location: P&W East Hartford, CT 12/05/96 Logged By: J. K Drilling Foreman: **Drilling Contractor:** J. Klapheke **Drilling Method:** Geoprobe J. Sweeton Sampling Method: Drill Rig: Geoprobe 5400 Macro Core **Groundwater Observations:** Surface Elevation: Depth: NM At: Hours Northing:

Depth:		At:	Hours	Easting:	
	Saz	nple Informa	tion	Sample Description	Γ
Elevation/ Depth	Sample No.	Recovery (X)	Blous /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ррп
	1022788	73		12": Dark reddish brown, fine to coarse SAND, with fine Gravel, some Silt, slightly moist, loose; 23": Dark reddish brown, fine SAND, with Silt, slightly moist, slightly dense	0.0
+4	1022790	56		21": Dark reddish brown, fine SAND, with Silt, moist, slightly dense; 6": Dark reddish brown, fine to coarse SAND, some Silt, wet, loose	0.0
1 8	1022792	58		Dark reddish brown, fine to coarse(+) SAND, little fine Gravel, wet, loose, subrounded	0.0
† † †	1022793				0.0
12	1022794 1022795	56		Dark reddish brown, fine to coarse(+) SAND and fine GRAVEL, wet, loose, occasional iron staining, greyish brown in color in last 4"±	0.0
20				Bottom of Boring 16'	
Comments	: Boreho	ole backfi	lled with be	entonite chips upon completion.	1

Project: Add. Invest. Contractor Storage Area
LEA Comm No: 68VC624
Client: Pratt & Whitney East Hartford
Location: P&W East Hartford, CT

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core
Groundwater Observations:

Depth: NM Depth:

At:

Hours

Start Date 12/05/96 End Date 12/05/96

Boring ID SA-SB-71

Logged By: J. Klapheke
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400

Surface Elevation:

Northing: Easting:

Depth:		At:	Hours	Easting:		
	San	nple Inform	ation	Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness		
	1022796	67		2": Reddish brown, fine to medium SAND, trace fine Gravel, slightly moist, loose, lightly rooted; 12": Compacted leaves and brush, rotting; 18": Reddish brown, fine to medium SAND, slightly moist to moist, loose, occasional iron staining	0.0	
+4	1022798	44		2": As Above; 9": Dark brown, fine SAND and SILT, moist, slightly dense; 10": Reddish brown, fine SAND, with Silt, moist, loose	0.0	
+8	1022800	65		Reddish brown to greyish brown, fine to coarse(+) SAND, trace fine Gravel, wet, loose, generally coarsening downward	0.0	
1	1022801				0.0	
+12 + + + + + + + + + + + + + + + + + +	1022802	63		Reddish brown, fine to coarse(+) SAND, little fine Gravel, wet, loose, coarseing downward to a greyish brown, fine GRAVEL, with fine to coarse(+) Sand, wet, loose	0.0	
+16 + + + + 20				Bottom of Boring 16'		
-24						
Comments	: Boreho	ole backf	illed with be	entonite chips upon completion.		

LΕΔ

Start Date Project: Add. Invest. Fire Training Area 'B' **Boring ID** 12/10/96 End Date LEA Comm No: 68VC623 Client: Pratt & Whitney **SA-SB-72** Location: East Hartford, CT 12/10/96 Logged By: B. Tomicic
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: **Drilling Contractor:** LEA Drilling Method: Geopre Sampling Method: Maci Groundwater Observations: J. Sweeton Geoprobe Macro Core Depth: NM At: Hours Northing: Easting: Depth: Hours At:

Deptn:		At:	Hours	푸	Easung:	
	San	nple Informa	ition		Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6°		Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
†°	1023145	92		low slig	o 1.5': Dark brown, fine SAND, some(-) medium Sand, r spherecity, organics, subrounded, moderately dense, httly moist; Bottom 6": Light brown, fine SAND, some(-)	0.0
†	1023146	100		\der	dium Sand, poorly sorted, slightly moist, moderately ase Above, moist	0.1
+4	1023147	50		As	Above	0.0
 	1023148	42		As	Above, wet	0.0
‡8 ‡	1023149	25		As	Above	0.0
‡ †	1023150	100		To; der	o 6": As Above; Bottom 1.5': Grey, fine SAND, wet, ase, well sorted	6.8
12	1023151	38		Lig	ht brown, fine SAND, wet, dense, poorly sorted	0.0
†	1023152	100		To _l	p 6": As Above; Bottom 1.5': Grey, varved CLAY, dense,	0.0
16				Bot	ttom of Boring at 16'	
20						
† † † †						
+24						
Comments	: Boreho	le backfi	illed with b	entor	nite chips upon completion.	

Project: Add. Invest. Fire Training Area 'B' LEA Comm No: 68VC623 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA **Drilling Method:** Geoprobe Sampling Method: Macr Groundwater Observations: Depth: NM At: Depth: At: Macro Core Hours

Start Date 12/10/96 **End Date** 12/10/96

Boring ID SA-SB-73

Logged By: B. Tomicic
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

Depth: Depth:		At: At:	Hours Hours	Northing: Easting:	
	Sar	mple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1023153	92		Top 1': Dark brown, fine SAND, trace(-) medium SAND, dry, loose, poorly sorted, organic material; Bottom 1': Brown, fine SAND, some medium Sand, slightly moist, moderately dense, poorly sorted	0.0
†	1023155	100		As Above	0.0
+4	1023156	25		As Above	0.2
† †	1023157	100		Top 1': As Above; Bottom 1': Greyish brown, fine SAND, some(+) medium Sand, wet, loose, poorly sorted, subrounded	2.2
+8	1023158	33		As Above	8.0
+ + +	1023159	100		As Above	0.2
+ 12	1023160	25		As Above; except Reddish brown and mottled	0.4
Ī	1023161	100		Grey, varved CLAY, wet, dense	0.0
16				Bottom of Boring at 16'	
20					
-24					
Commer	nts: Boreho	ole backfi	lled with be	entonite chips upon completion.	<u> </u>

Add. Invest. Fire Training Area 'B' Project: LEA Comm No: 68VC623 Client: Pratt & Whitney East Hartford, CT Location: LEA **Drilling Contractor:** Drilling Method: Geoprobe Sampling Method: Macro Core Groundwater Observations:

Start Date 12/11/96 End Date 12/11/96

Boring ID SA-SB-74

Logged By: B. To Drilling Foreman: Drill Rig: Geopre Surface Elevation: B. Tomicic J. Sweeton

Geoprobe 5400

Froundwate Tepth: NA Tepth:		tions: \t: \t:	Hours Hours	Surface Elevation: Northing: Easting:	
	San	pie Informati	on	Sample Description	
levation/ epth	Sample Recovery		Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
°	1023164	58		Top 3": Dark brown, fine SAND, some(-) medium Sand, slightly moist, loose, organic material; Bottom 1': Brown, fine SAND, trace medium Sand, slightly moist, loose,	0.0
I [1023165	100		As Above	0.0
+4	1023166	25		As Above	0.0
	1023167	92		Top 1': As Above; Bottom 1': Greyish brown, fine SAND, trace(+) medium Sand, slightly moist, loose, poorly sorted, subangular, grey/black staining, rank odor	13.0
+8	1023168	33		As Above	22.
‡	1023169	92		As Above	50.
+12	1023170	67		Top 1': As Above; Pinkish brown, fine SAND and(+) medium SAND, wet, loose, low sphericity, subangular, poorly sorted	1.0
#	1023171	75		Top 6": As Above; Bottom 1.5': Grey, varved CLAY, wet, dense	0.:
-16				Bottom of Boring at 16'	
-20					
-24					
comments:	De-ale-	la ba statii		entonite chips upon completion.	

Project: Add. Invest. Fire Training Area 'B'
LEA Comm No: 68VC623
Client: Pratt & Whitney
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro Core

Groundwater Observations:
Depth: NM At:
Depth: At:

Hours Hours

Start Date 12/11/96 End Date 12/11/96

Boring ID

SA-SB-75

Logged By: B. Tomicic
Drilling Foreman: J. Sweeton

Drill Rig: Geoprobe 5400 Surface Elevation:

Northing:

Depth:	At: Hours		Hours	₩ Easting:		
	San	ple Inform	ation	Sample Description	I	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
T°	1023172	50		Top 3": Dark brown, fine SAND, trace(-) medium Sand, slightly moist, loose, organics; Bottom 9": Brown, fine SAND, slightly moist, loose	0.0	
‡	1023173	100		As Above	0.0	
+4	1023174	33		Greyish brown, fine SAND and(-) medium Sand, slightly moist, loose, poorly sorted	0.0	
 	1023175	100		Top 1.5': As Above; Bottom 6": Grey, fine SAND, some(+) medium Sand, moist, loose, poorly sorted, slight rank odor, mottled	10.0	
+8	1023176	50		Grey, fine SAND, trace(+) medium Sand, wet, loose, poorly sorted, rank odor	26.0	
‡	1023177	100		As Above	22.0	
12	1023178	42		As Above	6.0	
<u> </u>	1023179	83		Top 8": Reddish brown, fine SAND and(+) medium SAND, wet, loose, poorly sorted; Bottom 1': Grey, varved CLAY, wet, dense	0.0	
+16 + + +			·	Bottom of Boring at 16'		
20						
24						
Comments	Boreho	ole backt	illed with Be	entonite chips upon completion.		

Add. Invest. Fire Training Area 'B' Project: LEA Comm No: 68VC623

Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Depth: NM At: Depth: At: Hours Hours

Start Date 12/18/97 **End Date** 12/18/97

Boring ID SA-SB-76

Logged By: B. Tomicic
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

Deptn:		At:	Hours	₹ Kasung:		
	Sar	nple Informa	tion	Sample Description		
Elevation/ Depth	Sample Recove		Recovery Blows (X)	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness		
10	1023859	83		Top 6": Dark brown, fine SAND, some(-) medium Sand, loose, slightly moist, processed stone, organics; Bottom 14": Light brown, fine SAND, trace(+) medium Sand, loose, slightly moist, poorly sorted	0.0	
†	1023860	100		Top 1': As Above; Bottom 1': As Above, wet	0.0	
+4	1023861	50		As Above; moist	0.0	
† † † †	1023862	50		Top 9": As Above; Bottom 3": Grey, medium SAND, some(-) fine Sand, loose, wet, poorly sorted, gray/black staining, rank odor	18	
†8 †	1023863	50		As Above	22	
†	1023864 1023865	100		Grey, fine SAND, trace(+) medium Sand, wet, loose, poorly sorted, grey/black staining, rank odor	28 30	
+12 +	1023866	50		As Above	20	
Į †	1023867	100		Top 2": As Above; 7": Reddish brown, fine SAND and(-) medium SAND, wet, loose, poorly sorted, mottling; Bottom 15": Olive grey, varved CLAY, wet, dense, stiff	0.0	
+16 + + + + + + + + + + + + + + + + + +				Bottom of Boring at 16'		
20				•		
‡						
24						
Comments	Borobo	le beckfi	lled with Pa	entonite chips upon completion.	1	
Confinence		no baokii	mou with Di	ontonico onps apon compicatori.		

Project: LEA Com Client: P	ratt & Whit	VC623 Iney East		'B' Start Date 12/18/97 End Date	Boring ID SA-SB-77	
Location: Drilling C Drilling M	ontractor: lethod: G	LEA eoprobe	····	12/18/97 Logged By: B. Tomi Drilling Foreman: Drill Plate Geography	cic J. Sweeton	
Sampling : Groundwa Depth: N Depth:	iter Observa IM	Macro C tions: At: At:	Lours Hours Hours	Drill Rig: Geoprobe Surface Elevation: Northing: Easting:	5400	
	San	nple Informat	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain S Moisture, Sorting, Sphericity, Angularity Sedimentary Structures, Density, Cohesiven	,	(ppm)
10	1023868	83		Top 4": Dark brown, fine SAND, trace(-) Sand, s moist, loose, processed, stone, organics; Brown, trace(-) medium Sand, slightly moist, loose, poor	fine SAND,	0.0
‡	1023869	100		As Above		0.0
+4				No Recovery		
 	1023871	75		Top 1': As Above; Bottom 6": Grey, fine SAND, medium Sand, moist, loose, poorly graded, grey/staining, rank odor	trace(+)	4.0
8	1023872	58		As Above, wet		5.0
† †	1023873	67	<u>.</u>	As Above		10.0
12	1023874	25		Reddish brown, fine SAND, trace(-) medium San loose, poorly graded, mottling	d, wet,	2.0
	1023875	0		Top 1': As Above; Bottom 1': Olive, grey, varve wet, dense, stiff	d CLAY,	4.0
+16 + + + + +				Bottom of Boring at 16'		
20						
24						
Comment	s: Boreho	le backfi	lled with B	ntonite chips upon completion.		
					•	

Depth: NM

Depth:

Add. Invest. Fire Training Area 'B' Project: Add. II LEA Comm No: 68VC623 Client: Pratt & Whitney East Hartford Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core Groundwater Observations:

At:

Hours

Hours

Start Date 2/18/96 End Date 12/18/96

Boring ID

SA-SB-78

Logged By: B. Tomicic
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

Elevation/ Depth	Sample No.	Recovery	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes,	
ļ°		1 1		Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
+ !	1023876	50		Dark brown, fine SAND, trace(-) coarse Sand, slightly moist, loose, poorly sorted, organics, processed stone	3.0
†	1023877	100		Brown, fine SAND, trace(-) medium Sand, slightly moist, loose, poorly sorted	4.0
+4				No Recovery	
†	1023879	33		Grey, fine SAND and(-) medium SAND, moist, loose, poorly sorted, grey/black staining, rank odor	4.0
+8	1023880	25		As Above, wet	2.0
† †	1023881	100		As Above	6.0
12	1023882	26		As Above	3.0
	1023883	100		Top 18": Reddish brown, fine SAND, some(-) medium Sand, wet, loose, poorly sorted, mottled; Bottom 6": Olive grey, varved CLAY, wet, dense, stiff	3.0
-16				Bottom of Boring at 16'	
20					
† † †					
+24					

LEA Com	South Airp n No: 68	VC628	rea		Start Date 12/19/96	Boring ID)
Client: Pr Location:	ratt & Whit East Hart	ney ford. CT		Į	End Date 12/19/96	SA-SB-7	9
Drilling Co Drilling Mo Sampling N	ontractor: ethod: G Method: ter Observa M	LEA ieoprobe Macro (* 3	Logged By: M. Drilling Foreman:	robe 5400	
Elevation/ Depth	Sample No.	Recovery	Blows /6*	Moist	Sample Description mary Grain Size, Secondary Gr ure, Sorting, Sphericity, Angula tary Structures, Density, Coher	arity,	(ppm)
0	1023892	75		Top 8": Dark br Silt, moist, loos	rown, fine SAND, trace medice, organics; 8-24": Brown, fim Sand, slightly moist	ım Sand, trace	0
† † †	1023893	100		As Above, trace	e Silt		0
+4	1023894	80		Brown, fine SA	ND, trace(-) medium Sand, lo	ose	0
† -	1023895	80		6": Reddish bro loose; Brown, fi loose	own, medium SAND, trace(+) ine SAND, trace(+) medium	fine Sand, wet, Sand, moist,	0
	1023896	80		As Above			0
‡	1023897	80		Dark brown, fin Sand, moist, loc	e SAND, some medium Sand ose	, trace(-) coarse	0
+12	1023898	95		As Above; Botto coarse Sand, m	om 3": Reddish brown, medio oist, loose	um Sand, some	0
‡	1023899	95		Top 3": As Abo), wet, loose	ove; Brown, fine SAND, trace	medium Sand(-	1.0
+16 + + + + +				Bottom of Borin	ng at 16'		
20							
+24							
Comments	: Boreho	ole backfi	lled with be	entonite chips upo	on completion.		

GEOLO(SIC BOR	ING L	OG		Page 1 of 1			
Project:	South Airpon No: 68	ort Fill A	rea	<u> </u>	Start Date 12/20/96	Boring II)	
Client: P	ratt & White East Hartf	ney		7	End Date 12/20/96	SA-SB-8		
Drilling Control of the Drilling Manual of the Sampling of Groundware Depth: National of the Depth:	ethod: G Method: ter Observat M A	LEA eoprobe Macro (ions: .t: .t:		R	Logged By: M. Drilling Foreman Drill Rig: Geo Surface Elevation Northing: Easting:	: J. Sweeton probe 5400		
Elevation/ Depth	Sam Sample No.	Recovery	Blows /6°	Moi	Sample Description rimary Grain Size, Secondary G isture, Sorting, Sphericity, Angu entary Structures, Density, Coh	larity,	(ppm)	

	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
•	1023925	95		Top 8": Dark brown, fine to medium SAND, trace(-) coarse Sand, some Silt, dry, loose; Bottom 16": Brown, fine SAND, trace(+) medium Sand, slightly moist, tight, occasional	
Ī	1023926	95		As Above, No coarse Gravel	
+4	1023927	40		As Above, with trace Silt	
‡	1023928	40		As Above, damp at Bottom 3"	
+ 8 +	1023929	80		As Above, wet with trace(-) organics	
† †	1023930	80		As Above, wet with trace(-) organics	
12	1023931	100		As Above	
† †	1023932	100		As Above	
+ 16				Bottom of Boring at 16'	
-20					
				·	
-24					
+					
Comment	s: Boreho	le backf	illed with b	entonite chips upon completion.	

South Airport Fill Area Project: Start Date **Boring ID** 68VC628 LEA Comm No: 12/20/96 Client: Pratt & Whitney **End Date SA-SB-82** Location: East Hartford, CT 12/20/96 **Drilling Contractor:** LEA Logged By: M. Budnick **Drilling Method:** Geoprobe J. Sweeton Drilling Foreman: Sampling Method: Drill Rig: Geoprobe 5400 **Macro Core** Groundwater Observations: Surface Elevation: Depth: NM At: Hours Northing: Depth: At: Hours **Easting:** Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows /6" Sample No. ecoveri (%) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1023933 80 Top 8": Dark brown, fine SAND, trace(+) medium Sand, trace(+) Silt, moist, loose, organics; Bottom 16": Brown, fine SAND, trace(-) medium Sand, slightly moist, tight 1023934 80 As Above 1023935 40 Top 3": As Above; Bottom: Very dark brown, fine SAND, trace(+) Silt, damp, tight 1023936 40 Red brown, fine SAND, trace(+) medium Sand; Bottom 3": 1023941 Wet, above damp, tight 1023937 85 As Above: Bottom 3": Red brown, medium SAND, trace(+), fine Sand, wet, loose 1023938 85 As Above; Bottom 2": Coarse SAND 12 1023939 85 Top 1": As Above; Bottom: Red brown, medium SAND, trace(-) fine Sand, wet, loose 1023940 As Above 16 Bottom of Boring at 16' 20 24 Borehole backfilled with bentonite chips upon completion. Comments:

Printed On: 1/21/1998

Project: South Airport Fill Area LEA Comm No: 68VC628 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Geoprobe Macro Core At: Depth: NM Hours Depth: Hours At:

Start Date 01/07/97 **End Date** 01/07/97

Boring ID

SA-SB-83

Logged By: D. Brisson
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 6": Topsoil; Middle 8": Brown, medium to fine SAND, trace(+) very fine Sand, organics, moist, loose; Bottom 10": Brown, fine SAND, trace(-) medium Sand, moist, loose	Deptn:	· · · · · · · · · · · · · · · · · · ·	41:	Hours	Tasung:		
Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cobesiveness Sedimentary Structures, Density, Cobesiveness Copen		Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity,		tion	<u> </u>		
1023944 75 As Above 1.0	Clevation/ Depth			Moisture, Sorting, Sphericity, Angularity,	(ppm)		
Top 6": Brown, medium to fine SAND, trace(-) very fine Sand, moist, dense; Middle 6": Brown, fine SAND, trace(+) medium Sand, dense, wet 1023946 42 Top 4": Brown, medium to fine SAND, loose, wet; Middle 14": Wood push probe through; Bottom 6": As Above top 4" 8 1023947 50 Top 6": Brown, medium to fine SAND, trace(-) coarse Sand, wet, loose; Bottom 6": As Above with 3" Cobble in sample 1023948 50 Grey, fine to medium SAND, wet, loose 0 Grey, fine to medium SAND, loose, wet 12 1023949 83 Orange, medium to fine SAND, loose, wet 0 Bottom of Boring at 16'	T °	1023943	100		trace(+) very fine Sand, organics, moist, loose; Bottom 10":	0	
Sand, moist, dense; Middle 6": Brown, fine SAND, trace(+) medium Sand, dense, wet 1023946 42 Top 4": Brown, medium to fine SAND, loose, wet; Middle 14": Wood push probe through; Bottom 6": As Above top 4" 1023947 50 Top 6": Brown, medium to fine SAND, trace(-) coarse Sand, wet, loose; Bottom 6": As Above with 3" Cobble in sample 1023948 50 Grey, fine to medium SAND, wet, loose 1023949 83 Orange, medium to fine SAND, loose, wet 1023950 83 As Above 0 Bottom of Boring at 16'	†	1023944	75		As Above	1.0	
14*: Wood push probe through; Bottom 6*: As Above top 4* Top 6*: Brown, medium to fine SAND, trace(-) coarse Sand, wet, loose; Bottom 6*: As Above with 3* Cobble in sample 1023948 50 Grey, fine to medium SAND, wet, loose 1023949 83 Orange, medium to fine SAND, loose, wet 1023950 83 As Above Bottom of Boring at 16'	+4	1023945	50		Sand, moist, dense; Middle 6": Brown, fine SAND, trace(+)	0	
wet, loose; Bottom 6": As Above with 3" Cobble in sample 1023948 50 Grey, fine to medium SAND, wet, loose 0 12 1023949 83 Orange, medium to fine SAND, loose, wet 0 1023950 83 As Above 0 16 Bottom of Boring at 16'	‡	1023946	42		14": Wood push probe through; Bottom 6": As Above top	0	
12 1023949 83 Orange, medium to fine SAND, loose, wet 0 1023950 83 As Above 0 18 Bottom of Boring at 16'	+8	1023947	50			0	
1023952 83 Orange, medium to fine SAND, loose, wet 1023950 83 As Above Bottom of Boring at 16'	Ī.	1023948	50		Grey, fine to medium SAND, wet, loose	0	
Bottom of Boring at 16'	+12	1023949 1023952	83		Orange, medium to fine SAND, loose, wet	0	
Bottom of Boring at 16'	† †	1023950	83		As Above	0	
	+16 + + + +				Bottom of Boring at 16'		
+ 24 + 24	20						
	-24						
	†						

LEA Comm Client: Pa Location:	ratt & White East Harti	VC628 ney ford, CT	ea	Start Date 01/08/97 Boring II End Date 01/08/97 SA-SB-8	
Drilling Co Drilling M Sampling I Groundwa Depth: N Depth:	ethod: G Method: ter Observat M A	LEA eoprobe Macro C tions: At:	ore Hours Hours		
	Sam	ple Informati	on	Sample Description	
Elevation/ Depth	Sample Na.	Recovery (%)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1023953	8	:	Top 4": Topsoil; Bottom 8": Brown, fine SAND, trace(+) medium Sand, organics, moist, loose	0
‡	1023954	50		Brown, fine SAND, trace(-) medium Sand, moist, loost, Cobble in shoe	0
+4	1023955	75		Top 8": As Above; Bottom 10": Brown, medium to fine SAND, trace(-) coarse Sand, wet at bottom 1"	0
‡	1023956	75		As Above, wet	0
+8	1023957	76		Brown, medium to fine SAND, trace(-) coarse Sand, trace(-) fine Gravel, wet, loose	0
† †	1023958	75		Top 10": As Above; Bottom 8": Brown, coarse to fine SAND, wet, loose	0
+12	1023959	76		Brown, medium to fine SAND, trace(-) coarse Sand, wet	0
}	1023960	76		As Above .	
16				Bottom of Boring at 16'	
20					
† †					
+ 24					
Comments	: Boreho	le backfil	led with b	entonite chips upon completion.	1

Project: South Airport Fill Area LEA Comm No: 68VC628

Client: Pratt & Whitney East Hartford Location: P&W East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations:
Depth: NM At: Hours Start Date 01/08/97 **End Date** 01/08/97

Boring ID **SA-SB-85**

Logged By: D. Brisson
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing:

Depth:		i: lt:	Hours	Easting:	
	San	ple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1023961	75		Top 4": Topsoil; 10": Brown, fine SAND, trace(+) medium Sand, trace organics, moist; 4": Concrete rubble	0
<u> </u>	1023962	76		Top 10": As Above; Bottom 8": Brown, medium to fine SAND, trace(-) coarse Sand, trace(-) fine Gravel, moist	0
*	1023963	42		Top 4": Brown, fine to very fine SAND, trace(-) medium Sand, dense, moist; Bottom 6": Brown, medium to fine SAND, trace(+) coarse Sand, loose, moist	0
‡	1023964	50		Brown, medium to fine SAND, moist, loose	0
†8 †	1023965	50		As Above, wet	0
	1023966	50		Brown, coarse to fine SAND, wet, loose, trace(-) fine Gravel, iron staining in Bottom 4"	0
12	1023967	76	·	Top 10": Brown, fine SAND, trace(-) medium Sand, wet, dense; Bottom 8": Brown, medium to fine SAND, trace(+) coarse Sand, wet, loose	0
‡	1023968 1023969	75		Brown, fine to medium SAND, wet, loose	0
16				Bottom of Boring at 16'	
20					
‡					
+24					
	<u> </u>				
Comments:	Boreho	le backfi	lled with be	entonite chips upon completion.	

Project: South Airport Fill Area LEA Comm No: 68VC628 Client: Pratt & Whitney East Hartford

Location: P&W East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** Geoprobe Sampling Method: Macro Core

Groundwater Observations: Depth: NM At: Depth: At: Hours Start Date 01/08/97 **End Date** 01/08/97

Boring ID

SA-SB-86

Logged By: D. Brisson

Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400

Surface Elevation: Northing: Easting:

Depth:		Lt:	Hours	₹ Easting:		
	San	ple Inform	ation	Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ррп	
To	1023972	75		Top 3": Topsoil; Bottom 15": Brown, fine SAND, trace(+) medium Sand, trace organics, loose, moist		
‡ †	1025973	75		As Above Soil; liner material, with brick and coal fragments in Bottom 5" of sample		
+4	1023974	50		Brown, fine SAND, little medium Sand, moist, trace organics, loose		
+ +	1023975	50		Brown, fine SAND, trace(-) very fine Sand, moist, trace organics, loose, Cobbles in sample		
+8	1023976	50		Top 10": Grey, medium to fine SAND, trace(-) very fine Sand, trace(-) coarse Sand, wet, trace(-) organics, loose; Bottom 2": Dark brown, medium to fine SAND, dense, wet		
	1023977	50		Top 8": As Above; Middle 4": Black, fine SAND, trace(-) Silt, trace(+) medium Sand, wet, dense; Bottom 4": Brown, fine SAND, trace(-) medium Sand, wet, loose		
112	1023978	75	-	Top 15": As Above; Bottom 3": Grey, fine SAND, trace(+) very fine Sand and Silt, trace organics, wet, dense		
	1023979	83	,	Dark grey to black, fine SAND, trace(+) very fine Sand, trace organics, wet, dense		
+16 +				Bottom of Boring at 16'		
20						
† †						
24						
Comments	: Boreho	le backf	illed with be	entonite chips upon completion.	<u> </u>	

Boring

Project: South Airport Fill Area LEA Comm No: 68V7079

Client: Pratt & Whitney East Hartford-JBK Location: P&W East Hartford, CT

LEA **Drilling Contractor:** Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Depth: Depth: At: At: Hours Hours Start Date 06/16/97 **End Date** 06/16/97

Boring ID

SA-SB-88

Logged By: J. K Drilling Foreman: J. Klapheke J. Trzaski Drill Rig: Geoprobe 5400 Surface Elevation:

Northing: Easting:

Depun:		Λι:	Hours	-	Easung:	
	San	pie Informa	tion		Sample Description	
Elevation/ Depth	Sample Mo.	Recovery (%)	Blows /6"		Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
·	1635876	88		Bro	own to black, fine SAND and SILT, dry to slightly moist, se, trace fine Gravel (top 12"), rooted	1.6
Ī	1635877				·	0.2
‡4	1635878	83			own to yellowish brown, fine to coarse SAND, little Silt, ce fine Gravel, moist, loose, slight coarsening downward	0.0
‡	1635879				·	0.6
‡8 ‡	1635880	83		Bro slig	own, fine to coarse SAND with fine Gravel, wet, loose, pht coarsening downward	0.0
‡	1635881					- 0.8
12	1635882	79		Bro	own, fine to coarse(+) SAND and fine GRAVEL, wet, se, occasional iron staining	0.0
‡	1635883		·			0.0
† 16				Bo	ttom of Boring at 16'	
Ŧ Ŧ						
+ 20				ı.		
‡ †						
‡24 1						
Comment	Porina	backfills	d with bent	onit		1
ATTITICE!!!	o buring	Dackiiile	u willi beni	OI II U	5	

Project: LEA Com	South Airp m No: 68	ort Fill A V7079	vrea.	· v	Start Date 06/16/97	Boring II	
Location:	P&W East		t Hartford-J d, CT	BK	End Date 06/16/97	SA-SB-8	9
Drilling Co Drilling M Sampling I Groundwa Depth: Depth:	ethod: G Method: ter Observa	LEA leoprobe Macro (tions: \t: \t:			Drilling Foreman: Drill Rig: Geop Surface Elevation: Northing: Easting:	robe 5400	
	San	ple Informs	ation		Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blays /6"	Moist Sedime	mary Grain Size, Secondary Gr ture, Sorting, Sphericity, Angul ntary Structures, Density, Cohe	arity, siveness	(ppm)
0	1635884	92		Brown to drk b coarse Gravel, fragments	rown, fine to medium SAND a dry to slightly moist, dense, o	and SILT with concrete	1.6
+4	1635886	62		Brown, fine to moist, loose	coarse SAND, trace Silt, trace	fine Gravel,	2.0
	1635887						2.3
+8 +	1635888	62		Brown, fine to to slightly dens	coarse(+) SAND with fine Gree, occasional iron staining	avel, wet, loose	0.0
† 	1635889					·	0.0
12	1635890 1635891	. 0		Brown to dark GRAVEL, wet, coarsening dov	brown, fine to coarse(+) SAN loose, occasional iron staining vnward	ID and fine g, slight	0.0
16				Bottom of Bori	ng at 16'		
-20							
Comments	s: Boring	backfille	ed with bent	tonite		-	

Start Date South Airport Fill Area Project: Boring ID 68V7079 LEA Comm No: 06/16/97 Client: Pratt & Whitney East Hartford-JBK **End Date SA-SB-90** 06/16/97 Location: P&W East Hartford, CT **Drilling Contractor:** Logged By: LEA J. Klapheke Drilling Foreman: **Drilling Method:** Geoprobe J. Trzaski Sampling Method: **Macro Core** Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Depth: Hours At: Northing: Depth: Hours Easting: At: Sample Description Sample Information Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Sample No. Blows covery (と) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1635892 83 Brown, fine SAND and SILT, trace fine to coarse Gravel (top 1.2 12"), dry to moist, loose, rooted 1635893 2.6 1635894 58 0.5 Brown, fine to coarse SAND, trace fine Gravel, moist to wet, loose 1635895 1.5 1635896 58 1.1 Brown to dark brown, fine to coarse(+) SAND, some fine Gravel, wet, loose to slightly dense, occasional iron staining 1635897 2.2 12 1635898 96 1.3 As Above, and fine Gravel 1635899 0.8 Printed On: 1/20/1998 16 Bottom of Boring at 16' 20 Boring No: SA-SB-90 Boring backfilled with bentonite

GEOTO	NO DON	ши		Page 1 of 1	
LEA Com	ratt & Whit	V7079 Iney East	Hartford-J	Start Date 06/17/97 Boring ID End Date 06/17/97 SA-SB-9	1
Drilling Co Drilling Me Sampling N	ntractor: ethod: G Method: ter Observa	LEA seoprobe Macro (Logged By: J. Trzaski Drilling Foreman: J. Klapheke Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
	San	ple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows ∕6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
,	1635904	46		Brown, fine SAND, little Silt, trace organic matter, trace process stone, fine and coarse Gravel and brick pieces at bottom 4", dry to slightly moist, loose	3.2
1	1635905				2.8
+	1635906	38		Brown to light yellowish brown, fine SAND, little Silt, trace(-) wood pieces, Cobble lodged in bottom, slightly moist to moist, loose	2.7
†	1635907				2.7
+8	1635908	76		Dark yellowish brown, fine SAND, some Silt, trace(-) medium Sand, trace organic matter, wet, loose	3.9
-12	1635909 1635910	76		Top 10": Dark brown, SILT and very fine SAND, little organic matter, moist, moderately dense; Bottom 8": Grey, medium to fine SAND, trace organic matter, wet, loose	2.1
T'2	1635911	75		Greyish brown, fine to coarse SAND, trace Silt, trace(-) organic matter, wet, loose	2.8
Ī	1635912	75		Brownish yellow, medium(+) to fine SAND, wet, loose	3.0
				Bottom of Boring at 16'	
-24					

Comments:

Project: South Airport Fill Area Start Date Boring ID 68V7079 LEÀ Comm No: 06/17/97 Client: Pratt & Whitney East Hartford-JBK **End Date** SA-SB-92 Location: P&W East Hartford, CT 06/17/97 **Drilling Contractor:** LEA Logged By: J. Trzaski Drilling Foreman: **Drilling Method:** Geoprobe J. Klapheke Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: Groundwater Observations: 章 Northing: Depth: At: Hours Depth: At: Hours Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, ecover! (ppm) Sedimentary Structures, Density, Cohesiveness 1635913 92 1.6 Top 14": Brown, fine SAND, some Silt, trace(-) fine and coarse Gravel, trace organic matter, dry, loose; Bottom 8": Brownish yellow, fine SAND, trace silt, slightly moist, 1635914 1.4 Top 6": Same as last 8"; Middle 3": Very pale brown, fine to coarse SAND, dry, loose; Bottom 13": Same as top 6": moist, moderately dense 1635915 100 1.4 Yellowish brown, fine to very fine SAND, little Silt, slightly moist to moist, moderately dense 100 1635916 Top 12": Dark yellowish brown, fine to very fine SAND, 1.8 little Silt, moist, moderately dense; Bottom 12": Dark brown, fine SAND, some Silt, trace(-) medium Sand, trace B organic matter, wet, loose 1635917 62 1.4 Dark brown, fine SAND, some Silt, trace(-) medium Sand, trace organic matter, wet, loose 1635918 62 1.9 Top 11": As Above; Bottom 4": Brownish yellow, fine to coarse SAND, trace Silt, wet, loose 12 1635919 83 2.3 Light brownish yellow, medium(+) to fine SAND, trace coarse Sand, wet, loose Printed 1635920 83 2.7 Brownish yellow, fine to coarse SAND, wet, loose On: 1/20/1998 16 Bottom of Boring at 16' 20 Boring No: SA-SB-92 Comments:

South Airport Fill Area m No: 68V7079 Project: South LEA Comm No: Client: Pratt & Whitney East Hartford-JBK Location: P&W East Hartford, CT Drilling Contractor: Drilling Method: LEA Geoprobe Macro Core Sampling Method: Groundwater Observations: Depth: At: Hours

Start Date 06/17/97 **End Date** 06/17/97

Boring ID

SA-SB-93

Logged By: J. Trzaski
Drilling Foreman: J. Klapheke
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:

Easting:

Depth:		At:	Hours	₹ Kasting:	
	San	nple Informati	on	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1635921	75		Brown, fine to very fine SAND, some Silt, trace organic matter, dry to slightly moist, loose	1.3
† † †	1635922	75		Top 9": Yellowish brown, fine SAND, trace Silt, slightly moist, loose; Bottom 9": Dark yellowish brown, fine SAND, trace medium Sand, trace Silt, moist, moderately dense	1.4
+4	1635923	75		Same as last 9"	1.5
‡ ‡	1635924	76		Top 2": Black asphalt; Bottom 16": Dark yellowish brown, fine SAND, some Silt, trace(-) medium Sand, moist to wet, loose	1.2
+8	1635925	62		Dark yellowish brown, fine(+) to medium SAND, trace Silt, trace organic matter, wet, loose	1.7
† †	1635926	62		Top 5": Dark brown, SILT, little organic matter, wet, moderately dense; Middle 5": Same as 8-10'; Bottom 5": Same as top 5", wood pieces at bottom	1.7
+12				No Recovery	
† †				No Recovery	
+16				Bottom of Boring at 16'	
-20					
-24					
Comment	s:				<u> </u>

Project: South Airport Fill Area Start Date **Boring ID** 68V7079 06/18/97 LEA Comm No: Client: Pratt & Whitney East Hartford-JBK **End Date SA-SB-94** P&W East Hartford, CT Location: 06/18/97 **Drilling Contractor:** LEA Logged By: J. Trzaski Geoprobe Drilling Foreman: J. Klapheke Drilling Method: **Macro Core** Sampling Method: Drill Rig: Geoprobe 5400 Groundwater Observations: Surface Elevation: Depth: Hours Northing: Depth: Hours At: Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. ecovery (%) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1635933 1.6 Brown, fine SAND, little Silt, trace organic matter (top 12"), trace fine and coarse Gravel, Cobble at bottom, dry to slightly moist, loose 1635934 1.4 1635935 50 1.8 Brown, fine SAND, little Silt, slightly moist, loose 1635936 50 1.6 Strong brown, fine SAND, little Silt, slightly moist to moist, moderately dense 8 1635937 92 1.6 Dark yellowish brown, fine SAND, little Silt, trace(-) 1635958 medium Sand, trace organic matter, wet, loose 1635939 92 1.7 Top 8": As Above; Middle 10": Dark brown to black, SILT with very fine Sand, trace organic matter, moist, moderately dense; Bottom 4": Greyish brown, fine to medium SAND, 12 trace Silt, trace organic matter, wet, loose 1635940 82 1.3 Top 7": Black, SILT with very fine to fine Sand, little orgtanic matter, wet, loose; Bottom 8": Greyish brown to light olive brown, fine to coarse SAND, wet, loose Printed 1635941 62 1.5 Same as last 8" On: 1/20/1998 16 Bottom of Boring at 16' 20 Comments:

Project: South Airport Fill Area LEA Comm No: 68V7079 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Sampling Method: Geoprobe Macro Core Groundwater Observations:
Depth: At:

Start Date 06/18/97 **End Date** 06/18/97

Boring ID

SA-SB-95

Logged By: J. Trzaski
Drilling Foreman: J. Klap
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing: J. Klapheke

Depth: Depth:		At: At:	Hours Hours	Northing: Easting:			
	San	nple Informat	ion	Sample Description			
Slevation/ Depth	Sample No.	Recovery (%)	Blaus /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
0	1635942 1635943	62		Yellowish brown, fine SAND, trace(+) Silt, trace organic matter, little process stone, fine and coarse Gravel (bottom 5"), dry to slightly moist, loose	4.4		
+ 4	1635944 1635945	50		Reddish brown to brown, fine SAND, trace medium Sand, trace(-) coarse Sand, trace(-) fine and coarse Gravel, slightly moist, loose	9.8		
8	1635946	62		Top 10": As Above, moist, loose; Bottom 5": Dark brown to black, fine SAND, some Silt, trace medium Sand, trace	2.4		
‡	1635947	62		organic matter, moist, loose Top 4": Same as last 5"; Middle 5": Black, SILT, some very fine to fine Sand, trace organic matter, moist, moderately dense; Bottom 6": Same as top 4", wet	1.4		
+12	1635948	96		Top 8": Same as last 6"; Bottom 15": Dark brown, fine to coarse(-) SAND, trace Silt, wet, loose	2.0		
‡	1635949	96		Light olive brown, fine to coarse(-) SAND, wet, loose	1.3		
+16 				Bottom of Boring at 16'			
24				·			
Comments	<u> </u>						

J. Klapheke

Project: South Airport Fill Area LEA Comm No: 68V7079 Client: Pratt & Whitney Location: East Hartford, CT LEA

Start Date Boring ID 06/18/97 **End Date** SA-SB-96 06/18/97 Logged By: J. To Drilling Foreman: J. Trzaski

Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macro Core Groundwater Observations: Depth: Hours At: Depth: At:

Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Hours Easting:

Depth:		VI:	Hours	₹ Kasung:	
	San	pie Informa	tion	Sample Description	
Slevation/ ' Depth	Sample No.	Recovery (な)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1635950	67	1	Yellowish brown to drk yellowish brown, fine SAND, little Silt, trace organic matter, dry to slightly moist, loose to moderately dense, concrete pieces at 8"	4.5
†	1635951	67		Top 8": As Above; Bottom 8": Light brown, fine SAND, trace(-) medium Sand, slightly moist, loose	7.2
+4	1635952	62		As Above	8.0
+	1635953	62		As Above, 2" bituminous asphalt at bottom	5.6
+ 8	1635954	79		Dark brown, fine SAND, some Silt, little organic matter, wet, loose	5.5
<u> </u>	1635955	79		Top 4": As Above; Bottom 15": Drk brown, SILT, some very fine Sand, little organic matter, moist, moderately dense	2.7
+12	1635956	71	, -	Same as last 15"	3.0
<u> </u>	1635957	71		Top 6": Greyish brown, fine to very fine SAND, wet, loose; Bottom 11": Light olive brown, medium to fine SAND, wet, loose	1.6
+16				Bottom of Boring at 16'	
+20					
‡ - -					
Ŧ					

Printed On: 1/22/1998

Project: South Airport Fill Area 68V7079 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Macro Core Groundwater Observations:

Start Date 6/20/97 End Date 06/20/97

Boring ID

SA-SB-97

Logged By: M. Busa
Drilling Foreman: J. Klap
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing: J. Klapheke

Depth: Depth:		At: At:	Hours Hours	Northing: Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Bious /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1635959	96		Dark brown, fine(+) to medium SAND, trace(+) Silt, roots, loose, dry	10.3
†	1635960	96		Dark brown to dark yellowish brown, fime(+) to medium SAND, little(-) Silt, slightly moist, loose to slightly dense	11.3
+4	1635961 1635962	75		0-6": Dark brown, fine SAND, little Silt; Dark yellowish brown, fine to medium SAND, trace Silt, slightly moist, slightly dense; Dark yellowish brown, fine to medium(+) to coarse(-) SAND, trace fine Gravel, moist, slightly dense	9.3
+8	1635963	79		0-6": Same as above; 6-8": Dark brown, fine(+) to medium SAND, little(+) Silt; 8"-2': Brown, fine(+) to medium	8.9
Ī	1635964			SAND, wet, fairly dense; 2-3': As Above; 3-4': Yellowish brown, fine to medium(+) to coarse SAND, wet, slightly dense	4.7
12	1635965	100		Dark greyish brown, fine to medium to coarse(-) SAND, trace very fine Gravel, wet, fairly loose	4.0
‡	1635966	100		Dark yellowish brown, fine(-) to medium(+) to coarse Sand, little(-) to trace fine Gravel, wet, fairly dense	1.5
16				15-16': Same as above except no GRAVEL and fine to medium SAND only. Bottom of Boring at 16'	
-20					
† † †					
24					
<u> </u>					
Comment	s:				

South Airport Fill Area Project: T Date **Boring ID** LEA Comm No: 68V7079 (20/97 Client: Pratt & Whitney En Date **SA-SB-98** Location: East Hartford, CT 00/20/97 **Drilling Contractor:** LEA Logged By: M. Busa **Drilling Method:** J. Klapheke Geoprobe Drilling Foreman: Drill Rig: Geopr Surface Elevation: Sampling Method: Macro Core Geoprobe 5400 **Groundwater Observations:** Depth: At: Hours Northing: Depth: At: Hours Easting: Sample Information Sample Description

ll .	Sam	ple Informa	ation	Sample Description	[
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1635967	83		0-6": Dark brown, fine(+) to medium SAND, little Silt, dry, loose, roots; Strong brown, fine to medium SAND, dry, fairly loose	7.4
 	1635968	83		Same as above	10.6
 	1635969	69		0-1': Strong brown, fine to medium SAND, loose, slightly damp; 1'-1'2": Very dark brown, fine(+) to medium SAND, lit,le Silt, dense, moist	10.6
	1635970	69		Light olive brown, fine to medium(+) SAND, trace coarse Sand, moist, slightly dense; 7-8': Brown, fine(+) to medium SAND, dense, moist	4.2
Ī				No Recovery	
				No Recovery	
†12 †	1 635971 1635972	100		12-13'8": Dark yellowish brown, fine to medium(+) to coarse(-) SAND, trace fine Gravel, moist, slightly dense; 13'8"-14': Dark reddish brown, fine(+) to medium SAND, dense, moist; 14'-14'2": Greyish brown, fine to medium SAND, little(-) fine Gravel, wet, slightly dense	1.2
16				Bottom of Boring at 16'	
20					
24				·	
II Commont	a Nota E	Lyten An	mi comple t	rakan of black cand at 1/1-1/12" as sample 1625071	

Comments:

Note: Extra 40ml sample taken of black sand at 14'-14'2" as sample 1635971

Printed On: 1/22/1998

Project: South Airport Fill Area LEA Comm No: 68V7079 LEĂ Comm No: Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Geoprobe Macro Core Depth: At: Hours

Start Date 06/20/97 **End Date** 06/20/97

Boring ID

SA-SB-99

Logged By: M. Busa
Drilling Foreman: J. Klar
Drill Rig: Geoprobe 5400
Surface Elevation: J. Klapheke

Northing: Resting:

Depth:		At:	Hours	¥	Easting:		ij.
	San	nple Inform	ation		Sample Description		1
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"		Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1635973 1635974	81		Sih me Ye	p 8": Dark reddish brown, fine to medium SAND, trace t, roots, dry, loose; 8"-2': Yellowish red, fine(+) to edium SAND, trace Silt, dry, slightly dense; 2-4': llowish brown, fine to medium SAND, dry to slightly poist	2.6 5.4	
+4	1635975 1635976	81		mo co: 7-8	6": Strong brown, fine(+) to medium SAND, trace Silt, bist, dense; 6"-2': Pale brown, fine to medium(+) to arse SAND, slightly moist, slightly dense; As above to 7'; 3': Pale brown to brown, fine(+) to medium SAND, moist, as a second	3.4 6.5	
-8	1635977	81		mo	9': Yellowish brown, fine(+) to medium SAND, trace Silt, sist, slightly dense; 9-10': Pale brown, fine(+) to medium ND, moist, dense	3.5	
‡	1635978	81			own, fine to medium(+) to coarse SAND, moist, slightly nse (more dense where Sand is fine)	2.8	
+12 + -	1635979	77		13	own, fine to medium SAND, moist, slightly dense; .5'-14': Dark brown to black, medium to coarse(+) ND, little fine Sand, wet, loose to slightly dense	0.0	-
† † †	1635980	77			rk yellowish brown, fine to medium(+) to coarse(-) ND, wet, slightly dense	0.6	
+16 - - - - -				Во	ttom of Boring at 16'		
+ 20 + + + +							
24							
Comments	S:				· · · · · · · · · · · · · · · · · · ·		#

Geoprobe

Macro Core

Drilling Method:

Sampling Method:

Groundwater Observations:

Project: South Airport Fill Area **Start Date LEA Comm No:** 68V7079 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA

06/23/97 **End Date** 06/23/97

Boring ID **SA-SB-100**

Logged By: J. T Drilling Foreman: J. Trzaski D. Brisson

Drill Rig: Geoprobe 5400 Surface Elevation:

oroundwat Depth: Depth:		uons: At: At:	Hours Hours	Surface Elevation: Northing: Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
-	1635996	75		Top 8": Yellowish brown, SILT with fine Sand, trace organic matter, dry, loose; Bottom 9": Very pale brown, fine SAND, trace medium Sand, slightly moist, loose	4.5
	1635997	75		Pale brown to yellowish brown, fine SAND, slightly moist, loose	6.0
+4	1635998	88	-	Yellowish brown, fine(+) to medium SAND, moist, loose	5.8
‡ + -	1635999 1636000	88		Top 2": Brown, very fine SAND, moist, loose; Bottom 16": Yellowish brown, fine(+) to medium SAND, moist to wet, loose	8.0
†*	1636001	50		Dark yellowish brown, fine to coarse(-) SAND, trace Silt, wet, loose, drk brown staining bottom 6"	9.0
‡	1636002	50		As Above, no staining	5.8
1 12	1636003	75		Dark yellowish brown, fine to medium SAND, wet, loose	6.0
+	1636004	75		Yellowish brown, fine to coarse SAND, wet, loose	7.0
16				Bottom of Boring at 16'	
20			i	·	
- 24					
Comments	<u> </u>				<u> </u>

Printed On: 1/22/1998

Project: South Airport Fill Area LEA Comm No: 68V7079 **Start Date** Boring ID 06/23/97 Client: Pratt & Whitney **End Date SA-SB-101** Location: East Hartford, CT 06/23/97 **Drilling Contractor:** LEA Geoprobe

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing: Drilling Method: Sampling Method: D. Brisson Macro Core **Groundwater Observations:**

Sample Information (2) Recover		Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Yellowish brown, SILT, some fine Sand, trace organic matter, dry, loose Yellowish brown, fine SAND, dry to slightly moist, loose Light yellowish brown, very fine SAND, slightly moist, loose Yellowish brown, fine SAND, some medium Sand (top 8"), moist, loose Yellowish brown, fine to medium SAND, trace coarse Sand, dark brown staining bottom 6", moist to wet, loose Dark yellowish brown, fine to medium SAND, wet, loose As Above	(ppm) 30.1 30.5 30.4 30.9 30.7
(2) 6006 76 6007 75 6008 62 6009 62 6010 67 6011 67	y Blows /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Yellowish brown, SILT, some fine Sand, trace organic matter, dry, loose Yellowish brown, fine SAND, dry to slightly moist, loose Light yellowish brown, very fine SAND, slightly moist, loose Yellowish brown, fine SAND, some medium Sand (top 8"), moist, loose Yellowish brown, fine to medium SAND, trace coarse Sand, dark brown staining bottom 6", moist to wet, loose Dark yellowish brown, fine to medium SAND, wet, loose As Above	30.1 30.5 30.4 30.3 30.9
6007 75 6008 62 6009 62 6010 67 8011 67		Yellowish brown, fine SAND, dry to slightly moist, loose Light yellowish brown, very fine SAND, slightly moist, loose Yellowish brown, fine SAND, some medium Sand (top 8"), moist, loose Yellowish brown, fine to medium SAND, trace coarse Sand, dark brown staining bottom 6", moist to wet, loose Dark yellowish brown, fine to medium SAND, wet, loose As Above	30.5 30.4 30.3 30.9 30.7
6008 62 6009 62 6010 67 6011 67		Light yellowish brown, very fine SAND, slightly moist, loose Yellowish brown, fine SAND, some medium Sand (top 8"), moist, loose Yellowish brown, fine to medium SAND, trace coarse Sand, dark brown staining bottom 6", moist to wet, loose Dark yellowish brown, fine to medium SAND, wet, loose As Above	30.4 30.3 30.9 30.7
6010 67 3011 67 3012 75		Yellowish brown, fine SAND, some medium Sand (top 8"), moist, loose Yellowish brown, fine to medium SAND, trace coarse Sand, dark brown staining bottom 6", moist to wet, loose Dark yellowish brown, fine to medium SAND, wet, loose As Above	30.3 30.9 30.7
8010 67 8011 67 8012 75		Yellowish brown, fine to medium SAND, trace coarse Sand, dark brown staining bottom 6", moist to wet, loose Dark yellowish brown, fine to medium SAND, wet, loose As Above	30.9
3011 67 3012 75		dark brown staining bottom 6", moist to wet, loose Dark yellowish brown, fine to medium SAND, wet, loose As Above	30.7
3012 75		As Above	30.5
5013 75	 	As Above, dark brown staining top 6"	20.5
	1		30.1
·		Bottom of Boring at 16'	
		·	

Project: South Airport Fill Area **Start Date Boring ID** LEA Comm No: 68V7079 06/23/97 Client: Pratt & Whitney **End Date SA-SB-102** Location: East Hartford, CT 06/23/97 **Drilling Contractor:** Logged By: J. Trzaski LEA Drilling Method: D. Brisson Drilling Foreman: Geoprobe Drill Rig: Sampling Method: Macro Core Geoprobe 5400 Surface Elevation: Groundwater Observations: Depth: At: Hours Northing: Hours Depth: At: Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows cover Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1636014 88 27.2 Top 10": Yellowish brown, SILT, little fine Sand, trace organic matter, dry, loose; Bottom 11": Light yellowish brown, fine to very fine SAND, trace Silt, dry to slightly moist, loose 1636015 88 31.0 Top 8": Same as last 11"; Bottom 13": Strong brown, fine SAND, trace medium Sand, trace Silt, slightly moist, loose 38.7 1636016 KR Top 5": Same as last 13": Bottom 9": Brown, fine SAND, trace medium Sand, trace Silt, moist, loose 1636017 22.2 Same as last 9", moist to wet 21.1 1636018 75 Yellowish brown, fine to coarse SAND, trace Silt, wet, loose 1636019 75 26.0 Light olive brown, fine to medium SAND, wet, loose 12 1636020 22.8 67 As Above 23.4 1636021 67 Printed On: 1/22/1998 Light olive brown to yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose 16 Bottom of Boring at 16' 20 24 Comments:

Page 1 of 1 Project: Tank Trailer Storage Area LEA Comm No: 68VC610 Start Date **Boring ID** 11/12/96 Client: Pratt & Whitney **End Date SA-SB-103** Location: East Hartford, CT 11/12/96 Logged By: L. Bianchi Drilling Foreman: J. Drill Rig: Hand Auger Surface Elevation: Drilling Contractor: Drilling Method: LEA Hand Auger J. Sweeton Sampling Method: Buck Groundwater Observations: Depth: NM At: **Bucket Auger** Northing:

Depth: N Depth:	M A	At: At:	Hours Hours	Northing: Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T °	1021142 1021143	100		Light brown, fine SAND, little Silt, moist, loose As Above	0.0 0.0
Ì				Bottom of Boring at 2.0'	
+4	!				
İ					
† + - -					
ް					
İ					
 					
+12 1					
+					
Ī					
+16					
Ī					
‡					
- 20					
<u>†</u>					
Ī					
+ 24					
Ī			į	·	
Comment	<u> </u>	لـــل	kfilled upon	<u></u>	



Project: South Airport Fill Area Start Date LEA Comm No: 68V7079 Client: Pratt & Whitney Location: East Hartford, CT

Boring ID 06/24/97 **End Date SA-SB-104** 06/24/97

Drilling Contractor: LEA **Drilling Method:** Geoprobe Sampling Method: Macro Core **Groundwater Observations:**

Depth:

Depth:

At: Hours Hours At:

Logged By: J. Trzaski Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

Northing: Easting:

veptn:		At:	Hours	₹ rasung:		
	San	nple Informa	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
ľ	1635989	75		Strong brown to pale brown, fine to medium SAND, trace Silt (top 8"), trace(-) coarse Sand, dry to slightly moist, loose	1.7	
‡	1635990				2.1	
+4	1635991 1636031	67		Light yelloish brown to yellowish brown, fine to coarse(-) SAND (top 24"), fine(+) to medium Sand (bottom 8"),	3.8	
† †	1636032			slightly moist to moist, loose	2.5	
+8	1636033	83		Yellowish brown, fine to coarse SAND, wet, loose,	3.8	
† † †	1636034			coarsening downward	4.2	
12	1636035	83		Strong brown to yellowish brown, fine to coarse SAND, fine to medium Sand (middle 10"), wet, loose	5.4	
+	1636036				4.8	
16						
†			1	Bottom of Boring at 16'		
‡						
+20						
† †						
+ 24						
Comment	<u> </u>					

South Airport Fill Area Project: 68V7079 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT LEA

Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macr Groundwater Observations: Macro Core

Depth:

At:

Hours

Start Date 06/24/97 **End Date** 06/24/97

Boring ID

SA-SB-105

Logged By: J. To Drilling Foreman: J. Trzaski

D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation:

Northing:

Depth:	Ī	At:	Hours	Easting:		
	San	nple Informa	tion	Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blaws 76"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppn	
	1636037 1636038	83		Top 28": Strong brown, SILT, some fine Sand, trace(-) coarse Gravel, trace medium Sand, dry to slightly moist, loose; Bottom 12": Dark yellowish brown, fine to medium SAND, trace(-) fine and coarse Gravel, trace Silt, slightly moist, loose, trace(-) coal pieces	3.1	
+4	1636039	83		Pale brown, fine to medium SAND, trace Silt, moist, loose	3.1	
†	1636040	83		Top 10": Light yellowish brown, fine SAND, trace very fine Sand, moist, loose; Bottom 10": Yellowish brown, medium SAND, trace fine Sand, wet, loose	4.7	
†8 1	1636041	71		Yellowish brown, fine to coarse SAND, trace Silt, dark brown staining bottom 2", wet, loose	4.9	
+	1636042				4.2	
12	1636043	83		As Above, dark brown staining top 8"	3.5	
‡	1636044				4.2	
16				Bottom of Boring at 16'		
-20						
+ + + 24						
Comments	:					

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Project: South Airport Fill / LEA Comm No: 68V7079 South Airport Fill Area Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Geoprobe Macro Core

Depth:

At:

Hours

Start Date 06/24/97 **End Date** 06/24/97

Boring ID

SA-SB-106

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing:

Depth:	Ž	At:	Hours	Easting:		
	San	nple Inform:	ation	Sample Description		
Elevation/ Depth	Sample No.	Recovery (火)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1636045 1636046	71		Top 15": Yellowish brown, fine(+) to medium SAND, some Silt, trace(-) organic matter, dry to slightly moist, loose; Bottom 19": Yellowish brown, fine(+) to medium SAND, slightly moist, loose	2.5	
4	1636047	67		Light yellowish brown, fine SAND, some very fine Sand, slightly moist to moist, loose	4.1	
† 	1636048	67		Light yellowish brown, fine(+) to coarse SAND, moist, loose	4.5	
+8	1636049	88		Yellowish brown, fine to coarse SAND, trace Silt, dark brown staining at 24-48", wet, loose	4.9	
+	1636050				4.3	
12	1636051	62		Yellowish brown, fine to coarse SAND, trace fine Grael, wet, loose	4.4	
†	1636052	62		Yellowish brown, medium to fine SAND, wet, loose	3.9	
+16				Bottom of Boring at 16'		
20						
24						
Comments	<u> </u> 5:	<u> </u>			<u></u>	

GEOLOGIC BORING LOG Page 1 of 1 Project: South Airport Fill Area Start Date **Boring ID** LEA Comm No: 68V7079 06/24/97 Client: Pratt & Whitney **End Date SA-SB-107** Location: East Hartford, CT 06/24/97 LEA Logged By: J. Trzaski **Drilling Contractor:** D. Brisson Drilling Method: Drilling Foreman: Geoprobe Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Surface Elevation: Groundwater Observations: Hours Northing: Depth: At: Depth: Hours Easting: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1636053 88 Brown to strong brown, SILT, some fine Sand, trace organic 2.0 matter, dry, loose to moderately dense 1036054 88 1.3 Light yellowish brown, fine SAND, trace medium Sand. slightly moist, loose 1636055 58 3.8 Light yellowish brown, fine(+) to medium SAND, moist, 1636056 2.9 1636057 75 3.6 Yellowish brown, fine to medium SAND, trace coarse Sand, iron staining bottom 8", wet, loose 1636058 3.5 12 1636059 83 3.7 Yellowish brown to light olive brown, fine to coarse SAND, wet, loose 3.7 1636060 18 Bottom of Boring at 16' 20 Comments:

Page 1 of 1 South Airport Fill Area Start Date Project: **Boring ID** LEÀ Comm No: 68V7079 06/24/97 Client: Pratt & Whitney **End Date SA-SB-109** 06/24/97 Location: East Hartford, CT J. Trzaski Logged By: **Drilling Contractor:** Drilling Foreman: Drilling Method: Geoprobe D. Brisson Sampling Method: Drill Rig: Macro Core Geoprobe 5400 Surface Elevation: Groundwater Observations: Depth: At: Northing: How Easting: Depth: At: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows cove (%) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1636069 88 3.0 Yellowish brown, SILT, little fine Sand, trace organic matter, dry, moderately dense 1636070 88 2.5 Brownish yellow, fine to medium SAND, dry to slightly moist, loose 1636071 71 2.3 Yellowish brown, fine to coarse SAND, slightly moist to moist, loose 71 0.9 1636072 Light yellowish brown, fine to medium SAND, moit, loose 1636073 83 4.1 Yellowish brown, fine SAND (18") coarsening downward to fine to coarse SAND, wet, loose, dark brown staining at 34-38" 1636074 4.3 12 1636075 0.1 Light olive brown, fine to medium SAND, trace Silt, trace coarse Sand, wet, loose 1636076 3.9 Printed On: 1/22/1998 Bottom of Boring at 16' 20 24

Comments:

Boring

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Project: South Airport Fill Area LEA Comm No: 68V7079 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations:

Depth: Depth:

Hours At:

Start Date 06/24/97 End Date 06/24/97

Boring ID

SA-SB-110

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing: Easting:

Sample Description Sample Description Sample Description Sample Description Sample Description Sample Description Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Dessity, Cohesiveness	Depth:		At:	Hours	₹ Easting:		
Septe Septe Secretary Secretary Secretary Molecure, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness		Sample Information			Sample Description		
1636078 1636078 1636078 1636079 75 Derk brown, SILT some fine Sand, trace medium Sand, trace organic matter, moist to wet, moderately dense to loose 1636080 1636081 83 Top 10*: As Above, wet, moderately dense; Bottom 10*: Olive grey, medium to fine SAND, trace Silt, wet, loose 1636082 83 Top 5*: As Above; Bottom 15*: Olive grey to light olive brown, fine to coarse SAND, iron staining at 11-14*, wet, loose 1636084 1636084 Bottom of boring at 16* Bottom of boring at 16*		Sample No.	Recovery (X)	Blaws /6"	Moisture, Sorting, Sphericity, Angularity,	(ppm)	
1636080 1636080 1636080 1636080 1636082 83 Top 10": As Above, wet, moderately dense; Bottom 10": Olive grey, medium to fine SAND, trace Silt, wet, loose 1636082 83 Top 5": As Above; Bottom 15": Olive grey to light olive brown, fine to coarse SAND, iron staining at 11-14", wet, loose 1636084 183 Yellowish brown, very fine to medium SAND, trace coarse Sand, wet, loose 1636084 Bottom of boring at 16'	-		88		organic matter (top 12"), trace(-) process stone fine and coarse Gravel (12-16") dry to slightly moist, moderately	0.0	
1636081 83 Top 10": As Above, wet, moderately dense; Bottom 10": Olive grey, medium to fine SAND, trace Silt, wet, loose 1636082 83 Top 5": As Above; Bottom 15": Olive grey to light olive brown, fine to coarse SAND, iron staining at 11-14", wet, loose 1636083 83 Yellowish brown, very fine to medium SAND, trace coarse Sand, wet, loose 1636084 Bottom of boring at 16'	+4	1636079	75			0.0	
1636081 83 Top 10": As Above, wet, moderately dense; Bottom 10": Olive grey, medium to fine SAND, trace Silt, wet, loose 1636082 83 Top 5": As Above; Bottom 15": Olive grey to light olive brown, fine to coarse SAND, iron staining at 11-14", wet, loose 1636083 83 Yellowish brown, very fine to medium SAND, trace coarse Sand, wet, loose 1636084 Bottom of boring at 16' Bottom of boring at 16'	† †	1636080				0.0	
brown, fine to coarse SAND, iron staining at 11-14", wet, loose 1636084 Pellowish brown, very fine to medium SAND, trace'coarse Sand, wet, loose Bottom of boring at 16' Bottom of boring at 16'	+8	1636081	83		Top 10": As Above, wet, moderately dense; Bottom 10": Olive grey, medium to fine SAND, trace Silt, wet, loose	0.0	
1636084 1636084 Pellowish brown, very fine to medium SAND, trace coarse Sand, wet, loose Bottom of boring at 16'	‡	1636082	83	·	brown, fine to coarse SAND, iron staining at 11-14", wet,	0.0	
Bottom of boring at 16'	†12	1636083	83			0.0	
Bottom of boring at 16'	<u> </u>	1636084				0.0	
24	+16				Bottom of boring at 16'		
	-20						
Comments	24						
Comments.	Comment	s:		l	<u> </u>	1	

THIS OF THE PARTY	O A	Cill A		Stand Date	
EA Com	South Airpo	ort Fill Ar V7079	68	Start Date 06/25/97 Boring II)
lient: P	ratt & Whit	ney		End Date CA CD 11	14
ocation:				06/25/97	1 1
rilling M ampling	Method: iter Observa	LEA seoprobe Macro C tions: \t:	Hours	Logged By: J. Trzaski Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Northing:	
epth:		\t:	Hoile	₩ Easting:	
	Sam	ple Informat	ion	Sample Description	
Elevation/ Depth	Sample Mo.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1636091	75		Brown to strong brown, SiLT, some fine Sand, trace organic matter (top 8"), dry, loose, trace process stone fine and coarse Gravel	2.2
‡	1636092	75		Yellowish brown, fine SAND, dry to slightly moist, loose	2.0
+4	1636093	62		Light yellowish brown, fine(+) to medium SAND, trace(-) coarse Sand, slightly moist to moist, loose, slight coarsening downward to fine to medium SAND (bottom 10")	1.9
+	1636094			boardoning downward to mile to modism or med (bottom 10)	2.7
+ + +	1636095 1636096	79		Yellowish brown, (fine(+) to coarse SAND, wet, loose	1.5
ŧ	1636097			·	2.5
12	1636098	76		Dark yellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose	2.1
Ī	1636099	75		Dark brown staining at 24-30"	2.1
16				Bottom of Boring at 16'	
20					
+ 20					
24					
‡				· •	
	İ	_ 		<u></u>	
Comment	s:	_11			1

Start Date Project: South Airport Fill Area Boring ID LEA Comm No: 68V7079 06/25/97 Client: Pratt & Whitney **End Date** SA-SB-112 Location: East Hartford, CT 06/25/97 **Drilling Contractor:** LEA Logged By: J. Trzaski Drilling Foreman: Drilling Method: Geoprobe D. Brisson Sampling Method: Macro Core Drill Rig: Geoprobe 5400 **Groundwater Observations:** Surface Elevation: Depth: Hours Northing: Depth: Hours Easting: Sample Information Sample Description Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Blows lecover (な) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1636100 83 2.0 Brown to strong brown, SILT, some fine Sand, trace organic matter, dry, loose 1636101 83 2.3 Light yellowish brown, fine to medium SAND, dry to slightly moist, loose 62 1636102 2.0 Light yellowish brown to yellowish brown, fine to medium SAND, trace coarse Sand, moist to wet, loose, wet at 20" 1636103 1.9 1636104 92 2.3 Yellowish brown, fine to medium SAND, wet, loose 1636105 92 2.2 As Above 12 1636106 75 2.3 Yellowish brown, fine to coarse SAND, trace fine Gravel. wet, loose Printed 1636107 75 1.8 Top 5": Yellowish brown, medium to coarse SAND, wet, loose; Bottom 13": Grey, CLAY, trace brown very fine Sand, and Silt, laminated, wet, loose On: 1/22/1998 16 Bottom of Boring at 16' 20 Boring Comments:

Project: South Airport Fill Area
LEA Comm No: 68V7079
Client: Pratt & Whitney East Hartford-JBK

Location: P&W East Hartford, CT

Drilling Contractor: LE.
Drilling Method: Geopro
Sampling Method: Macr
Groundwater Observations: Geoprobe Macro Core

Depth:

At:

Hours

Start Date 06/27/97 **End Date** 06/27/97

Boring ID

SA-SB-113

Logged By: J. To Drilling Foreman: J. Trzaski

D. Brisson Drill Rig: Geoprobe 5400

Surface Elevation:

Northing:

Depth:		At:	Hours	Easting:	
	San	nple Inform	nation Sample Description		
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1636114 1636115 1636116	62	,	Greyish brown to yellowish brown, fine SAND, trace medium SAND, trace Silt (Top 10") trace organic matter (top 10"), dry to moist, loose, Cobble at 8"	0.2
+ + +	1636117	54		Yellowish brown, fine SANd, trace Silt, trace medium Sand, moist to wet, loose, wet at bottom	0.8
†	1636118	64		16-22": Dark brown, fine SAND, little Silt, trace medium Sand, trace organic matter, moist, loose, wet at bottom	0.0
+8	1636119	67		Yellowish brown, fine to medium SAND, trace(-) coarse Sand, wet, loose	0.2
†	1636120				0.0
12	1636121 1636122	50 50		Yellowish brown to greyish brown, fine to coarse SAND, trace fine gravel, wet, loose Slight coarsening downward	0.5 0.0
16			:	Bottom of Boring at 16'	
-20					
24					
Comments	<u> </u>			<u> </u>	i

Start Date Project: South Airport Fill Area Boring ID LEA Comm No: 68V7079 06/27/97 Client: Pratt & Whitney East Hartford-JBK **End Date** SA-SB-114 Location: P&W East Hartford, CT 06/27*/*97 **Drilling Contractor:** LEA Logged By: J. Trzaski Drilling Method: Geoprobe Drilling Foreman: D. Brisson Sampling Method: Macro Core Drill Rig: Geoprobe 5400 Groundwater Observations: Surface Elevation: Hours Depth: At: Northing: Hours Easting: Depth: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1636123 76 0.0 Top 3": Reddish brown, fine to coarse SAND, trace Silt, some fine and coarse Gravel, moist, loose; Bottom 15": Yellowish brown, fine SAND, little Silt, trace medium and coarse Sand, moist, moderately dense 1636124 75 0.4 Brownish yellow, fine to medium SAND, trace(-) coarse Sand, slightly moist to moist, loose 1636125 75 0.3 Yellowish brown, fine(+) to medium SAND, trace(-) coarse Sand, moist to wet, loose 1636126 75 0.0 Fining downward to fine SAND (last 6"), wet bottom 4" 1636127 79 Yellowish brown, fine SAND, trace very fine Sand, trace 0.0 medium Sand, wet, loose, coarsening downward to Yellowish brown, fine to coarse SAND, wet, loose 1636128 0.0 12 1636129 92 0.7 Yellowish brown, fine to coarse SAND, wet, loose 1636130 92 0.0 As Above 16 Bottom of Boring at 16' 20 Comments:

Printed

Ont 1/20/1998

Project: South Airport Fill Area LEA Comm No: 68V7079 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macro Core **Groundwater Observations:** Depth: Hours

ert Date 06/27/97 End Date 06/27/97

Boring ID

SA-SB-115

Logged By: J. Trzaski
Drilling Foreman: D. Bris
Drill Rig: Geoprobe 5400
Surface Elevation: D. Brisson

Northing:

Depth:	At: Hours			Easting:		
Elevation/ Depth	San	nple Inform	ation	Sample Description		
	Sample No.	Recovery (火)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1636131	92	,	Top 8": Reddish brown, fine SAND, little fine and coarse Gravel, trace medium and coarse Sand, moist, loose; Bottom 14": Yellowish brown, fine SAND, some Silt, slightly moist,	0.0	
Ī	1636132	92		moderately dense Yellowish brown, fine(+) to medium SAND, slightly moist to moist, loose	0.0	
† 4	1636133	58		Yellowish brown, fine(+) to medium SAND, fining downward to fine Sand (bottom 10"), moist to wet, loose, wet at bottom	0.0	
 	1636134	58		wet at bottom	0.0	
	1636135	75		Yellowish brown, fine to very fine SAND, trace medium Sand, wet, loose	0.0	
‡	1636136	75		Top 14": Yellowish brown, fine(+) to medium SAND, wet, loose, trace very fine Sand; Bottom 4": Yellowish brown, fine to coarse SAND, wet, loose	0.0	
†12 †	1636137	46		Yellowish brown to greyish brown, fine to coarse SAND, wet, loose	0.0	
†	1636138			•	0.0	
16				Bottom of Boring at 16'		
24						
Comments	s:	<u> </u>		·		

Start Date Project: South Airport Fill Area Boring ID LEA Comm No: 68V7079 06/30/97 Client: Pratt & Whitney East Hartford-JBK **End Date** SA-SB-116 Location: P&W East Hartford, CT 06/30/97 Logged By: J. T Drilling Foreman: **Drilling Contractor:** J. Trzaski **Drilling Method:** Geoprobe D. Brisson Sampling Method: Drill Rig: Geoprobe 5400 Macro Core Surface Elevation: **Groundwater Observations:** Depth: Hour Northing: At: Depth: At: Hours Easting: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blaus /6" Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1636144 62 1.3 Strong brown to yellowish brown, fine SAND, some Silt, trace medium Sand, trace organic matter, dry to slightly moist, loose to moderately dense, 1": layer bituminous asphalt at 8" 0.0 1636145 1636147 50 0.0 Light yellowish brown, fine SAND, trace medium Sand, grading to fine to medium Sand (bottom 10"), moist, loose 1636148 0.1 0.0 1636149 67 Top 10": Light yellowish brown, fine to medium SAND, wet, loose; Middle 8": Yellowish brown, fine to very fine SAND, micaceous, wet, loose; Bottom 14": Yellowish brown, fine to coarse SAND, trace fine Gravel, wet, loose 1636150 0.0 0.0 1636151 29 Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose Printed 1636152 5.0 5 16 Bottom of Boring at 16' 1/20/1998 20 Boring No: SA-SB-116 Comments:

South Airport Fill Area m No: 68V7079 Project: LEA Comm No: Client: Pratt & Whitney East Hartford-JBK Location: P&W East Hartford, CT **Drilling Contractor:** LEA

Drilling Method: Geoprobe Sampling Method: Macro Core **Groundwater Observations:**

Depth: Depth: At: Hours Hours

tart Date 06/30/97 End Date 06/30/97

Boring ID **SA-SB-117**

Logged By: D. Brisson
Drilling Foreman: J. Trzaski
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:

Fasting:

Depth:	At: Hours				
	Sample Information			Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	1636153	83		Top 10": Drk brown, medium to very fine SAND, trace coarse Sand and Gravel, trace organic matter, dry, loose; Bottom 10": Red brown, medium to fine SAND, trace coarse Sand, moist, moderately dense	0.0
-	1636154	83		Yellow brown, fine SAND, trace(+) medium Sand, moist, loose	0.0
+4	1636155	75		Top 10": Orange brown, coarse to fine SAND, moist, loose; Bottom 8": Orange brown to grey brown, fine SAND, moist, loose	0.0
.‡ .‡	1636156	75		18": As Above bottom 8"	0.4
+8	1636157	62		Grey orange brown, medium to fine SAND, trace(+) coarse Sand, trace(-) pea gravel, wet, loose	0.0
‡	1636158	62		As Above, iron staining present	0.0
12	1636159	62		Top 6": Brown, fine SAND, trace medium Sand, moist, loost; Bottom 9": Olive grey, medium to fine SAND, trace coarse Sand, wet, loose	0.0
‡	1636160	62		As Above Bottom 9"	0.0
+16 + + + + +				Bottom of Boring at 16'	
20					
24					
Comments	S:			.	<u> </u>

Project: South Airport Fill Area
LEA Comm No: 68V7079
Client: Pratt & Whitney East Hartford-JBK
Location: P&W East Hartford, CT

Drilling Contractor: LE/ Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Geoprobe Macro Core

Depth:

Hours

Start Date 06/30/97 **End Date** 06/30/97

Boring ID

SA-SB-118

Logged By: J. Trzaski Drilling Foreman: D. Bris Drill Rig: Geoprobe 5400 Surface Elevation: D. Brisson

Northing:

Depth:	At: Hours Sample Information			Easting: Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
T °	1636161	25		Yellowish brown to drk yellowish brown, fine to very fine SAND, little Silt, trace organic matter, dry, loose	0.0	
+	no samp.				no re	
14	1636163	58		Yellowish brown, fine(+) to medium SAND (top 10"), grading to medium to fine, trace coarse Sand (bottom 6"), slightly moist to moist, loose	0.0	
† † †	1636164					
-8	1636165	79		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	0.0	
ļ ţ	1636166	79		Yellowish brown, fine to coarse(+) SAND, wet, loose, trace fine Gravel	0.0	
+12 +	1636167	83		As Above, little fine GRAVEL	0.0	
+	1636168	83		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	0.0	
16				Bottom of Boring at 16'	0.0	
+ 						
-24				·		
<u> </u>						
Comments	5:					

Project: SA Contractor Storage Area
LEA Comm No: 68V7082
Client: P&W East Hartford

Location: East Hartford, CT

Drilling Contractor: Drilling Method: LEA GeoProbe Macro Core Sampling Method:

Groundwater Observations:

Depth:

At:

Hours

Start Date 7/1/97 **End Date** 7/1/97

Boring ID

SA-SB-119

J. Trzaski

Logged By: J. T Drilling Foreman: D. Brisson Drill Rig: GeoProbe 5400

Surface Elevation: Northing:

Depth:	At: Hours		Hours	Easting:		
	Sar	nple Informat	tion	Sample Description	Ι	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
ļ°	1637748 1637747	120 120		Top 8": Reddish brown to yellowish brown, fine SAND, some Silt, little fine and coarse gravel, trace bituminous asphalt, dry loose	21.5	
† † †	1637749	120	· .	Bottom 32": Yellowish brown to greyish brown, fine to medium SAND, trace(-) coarse Sand, dry to slightly moist, loose	32.0	
†	1637750	200		Light Yellowish brown fine to medium SAND, slightly moist to moist, loose	27.7	
‡ ‡	1637751	200		Slight iron staining (bottom 2")	10.1	
+8	1637752	120		Yellowish brown to light olive brown, fine SAND, little medium Sand, trace very fine Sand, wet, loose	0.0	
+	1637753	120			0.0	
12	1637764	133		Top 24*: Light olive brown gellowish brown fine to coarse(+) SAND, trace fine Gravel (pea size), wet, loose	1.8	
†	1637755	133		Bottom 12": Yellowish brown medium(+) to fine SAND, trace coarse Sand, wet, loose	1.3	
+16 + + + +				Bottom of Boring 16'		
20						
-24						
Comments	<u> </u> s:				1	

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LEA Com	SA Contrac m No: 68 &W East H	V7082	age Area	Start Date Boring II 7/1/97 End Date CA CD 46	li li
Location: Drilling Controlling M Sampling	East Hart ontractor: ethod: G	ford, CT LEA leoProbe Macro (Logged By: J. Trzaski Drilling Foreman: D. Brisson Drill Rig: GeoProbe 5400 Surface Elevation:	20
Depth: Depth:	A	kt: kt:	Hours Hours	Northing: Easting:	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6*	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1637756	120		Top 10": Reddish brown to yellowish brown fine SAND, some Silt, little fine and coarse Gravel, trace(-) bituminous asphalt, dry, loose	21.9
‡ ‡	1637757	120		Bottom 30": Yellowish brown to greyish brown fine(+) to medium SAND, trace(-) coarse Sand, slight coarsening downward to medium to fine Sand, dry to slightly moist,	39.0
1 1 4	1637758	150		Light yellowish brown fine to medium SAND, slightly moist to moist, loose	18.2
† † †	1637759	150			2.9
8	1633760	133		Light olive brown, fine SAND, trace very fine Sand, trace medium Sand, wet, loose	1.6
† †	1637761	133			0.4
+12 +	1637762	114		Dark yellowish brown, fine to coarse SAND, trace fine Gravel (pea size), wet, loose	0.4
† †	1637763	114			0.1
- 16	·			Bottom of Boring 16'	
+20 +					
Comments	5:				

Start Date Project: SA Contractor Storage Area Boring ID LEA Comm No: 68V7082 7/1/97 Client: P&W East Hartford End Date **SA-SB-121** Location: East Hartford, CT 7/1/97 LEA Logged By: J. Trzaski **Drilling Contractor:** Drilling Foreman: D. Brisson Drilling Method: **GeoProbe** Drill Rig: GeoProbe 5400 Sampling Method: **Macro Core** Surface Elevation: Groundwater Observations: Depth: At: Hours Northing: Hours Easting: Depth: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 43.3 1637764 120 Top 6": Reddish brown, fine SAND, little medium and coarse Sand, trace fine and coarse Gravel 120 29.9 1637765 Bottom 28": Yellowish brown to greyish brown, fine(+) to medium SAND, slightly moist, loose 22.8 1637766 160 Light yellowish brown, fine SAND, trace medium Sand, slightly moist to moist, loose 0.0 1637767 160 1637768 133 Light olive brown fine SAND, trace medium Sand, trace very fine Sand, wet, loose 1637769 133 0.0 12 0.0 1637770 133 Light olive brown, medium to fine SAND, trace coarse Sand, slight coarsening downward, wet, loose 0.0 133 1637771 Bottom of Boring 16' 20 Comments:

Project: SA Contractor Storage Area **Start Date** Boring ID **LEA Comm No:** 68V7082 7/1/97 Client: P&W East Hartford **End Date SA-SB-122** Location: East Hartford, CT 7/1/97 **Drilling Contractor:** Logged By: J. Trzaski LEA Drilling Method: **GeoProbe** Drilling Foreman: D. Brisson Drill Rig: GeoPr Surface Elevation: Sampling Method: **Macro Core** GeoProbe 5400 **Groundwater Observations:** Hour Northing: Depth: At: Depth: At: ours Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, cover (な) (ppm) Sedimentary Structures, Density, Cohesiveness 1637774 25.5 Top 10": Reddish brown, fine SAND, little medium and coarse Sand, trace Silt, trace fine and coarse Gravel, dry, loose 1637775 109 23.7 Bottom 34": Light yellowish brown fine(+) to medium SAND, dry to slightly moist, loose 1637776 133 0.0 Light yellowish brown fine SAND, slightly moist to wet, loose, wet at bottom 1637777 133 0.0 1637778 114 0.0 Light olive brown fine(+) to medium SAND, trace coarse Sand, wet, loose 1637779 114 0.0 12 1637780 141 19.7 Dark yellowish brown medium to fine SAND, trace coarse Sand, wet, loose 1637781 141 20.4 Printed On: 1/20/1998 Slight coarsening downward Bottom of Boring 16' 20 Comments:

Project: SA Contractor Storage Area Start Date **Boring ID** 7/1/97 LEA Comm No: 68V7082 **End Date** Client: P&W East Hartford **SA-SB-123** 7/1/97 East Hartford, CT Location: LEA Logged By: J. Trzaski **Drilling Contractor:** Drilling Foreman: Drilling Method: GeoProbe D. Brisson Drill Rig: GeoProbe 5400 Sampling Method: Macro Core Surface Elevation: Groundwater Observations: Hours Northing: Depth: Depth: Hours 4 Easting: At: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 21.3 1637782 109 Top 6": Reddish brown, fine SAND, little medium and coarse Sand, trace fine and coarse Gravel, dry, loose. Bottom 16": Yellowish brown fine SAND, little silt, trace medium Sand, dry, loose 16.4 1637783 109 Light yellowish brown fine SAND, trace medium Sand, slightly moist, loose 1637784 150 3.8 Light yellowish brown fine(+) to medium SAND, slightly moist to moist, loose 1.6 1637785 150 0.0 1637786 133 Top 24": Yellowish fine(+) to medium SAND, coarsening downward to fine to coarse(+) Sand (Bottom 12") wet, loose 1637787 133 0.0 Slight iron staining at 8" 12 0.0 1637788 141 Light olive brown fine to medium SAND, little coarse Sand, wet loose 1637789 0.0 141 Printed On: 1/20/1998 16 Bottom of Boring 16' 20 24 Boring

Comments:

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LEA Com Client: P	ratt & Whit	V7081 mey		Start Date Boring III	Ì
Location: Drilling Contilling M Sampling I Groundwa Depth: Depth:	ethod: G Method: ter Observa	LEA ieoprobe Macro (МС	Logged By: J. Trzaski Drilling Foreman: D. Brisson Drill Rig: GP-5400 Surface Elevation: Northing: Easting:	- T
	San	ple Informa	tion	Sample Description	Γ
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
·	1637079	79		Top 8": Pale brown, fine to medium SAND, trace Silt, trace organic matter, dry, loose; Bottom 11": Brown to orangish brown, fine SAND, little Silt, trace medium Sand,	4.2
	1637080 1637081	79		Orangish brown to light yellowish brown, fine SAND, trace Silt; Top 8": trace medium SAND, slightly moist, moderately dense to loose	3.9
+	1637082	62		Light yellowish brown, medium to fine SAND, moist to wet, loose, wet at 25"	5.1
<u> </u>	1637083	62			5.1
 8	1637084	67		Yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose, iron staining from 16-32"	2.8
<u> </u>	1637085	67			4.5
12	1637086	71		Orange brown to light olive brown, fine to medium SAND, trace coarse SAND, wet, loose	4.3
 	1637087	71			4.6
18			·	Bottom of Boring at 16'	
20					
-24					
1 1			İ		
Comments	<u> </u> s:	.11			<u> </u>

Groundwater Observations:

Project: SA Fire Training Area B Start Date 68V7081 07/02/97 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Sampling Method: Geoprobe MC

Macro Core

Boring ID End Date SA-SB-125 07/02/97

Logged By: J. Trzas Drilling Foreman: Drill Rig: GP-5400 J. Trzaski D. Brisson

Surface Elevation:

		Hours Hours	Northing: Easting:	
San	nple Informat	tion	Sample Description	
Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
1637088	92		Brown fine SAND, some Silt, trace medium Sand, trace organic matter, dry, loose; Bottom 6": Orange brown fine SAND, trace Silt, dry, moderately dense	17.7
1637089	92		Top 4": As above last 6"; Bottom 18": Light yellowish brown fine SAND, trace medium Sand, slightly moist, loose	33.6
1637090	62		Light yellowish brown fine SAND, trace medium Sand, moist to wet, loose, iron staining at 16-22", wet at 20"	24.8
1637091	62			27.7
1637092	75		Light yellowish brown to orange brown, fine to medium SAND, trace coarse Sand, wet, loose, trace coarse Sand	3.4
1637093				2.8
1637094	62		Light olive brown, fine to medium SAND, wet, loose	2.5
1637095	62		Orange brown, fine to coarse SAND, wet, loose	3.4
	++		Bottom of Boring at 16'	<u> </u>
	Sam Sample No. 1637088 1637089 1637090 1637091 1637092 1637093	Sample Recovery (2) 1637088 92 1637089 92 1637090 62 1637091 62 1637092 75 1637093	At: Hours Sample Information Sample No. Recovery (x) Blows /6* 1637088 92 1637089 92 1637090 62 1637091 62 1637093 75 1637094 62	Sample Information Sample Information Sample Recovery Recovery (X) Blows (X) Sedimentary Structures, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 1637088 92 Brown fine SAND, some Silt, trace medium Sand, trace organic matter, dry, loose; Bottom 6": Orange brown fine SAND, trace Silt, dry, moderately dense 1637089 92 Top 4": As above last 6"; Bottom 18": Light yellowish brown fine SAND, trace medium Sand, slightly moist, loose 1637090 62 Light yellowish brown fine SAND, trace medium Sand, moist to wet, loose, iron staining at 16-22", wet at 20" 1637091 62 Light yellowish brown to orange brown, fine to medium SAND, trace coarse Sand 1637093 Light olive brown, fine to medium SAND, wet, loose 1637094 62 Light olive brown, fine to medium SAND, wet, loose

Project: SA Fire Training Area B LEA Comm No: 68V7081

Client: Pratt & Whitney East Hartford

Location: East Hartford, CT

Drilling Contractor: Drilling Method: Geopre Sampling Method: Maci Groundwater Observations: Geoprobe MC Macro Core

Depth: At: Hours

Start Date 07/02/97 End Date 07/02/97

Boring ID

SA-SB-126

J. Trzaski

Logged By: J. Trzas Drilling Foreman: Drill Rig: GP-5400 Surface Elevation: D. Brisson

Northing:

Depth:		At:	Hours	₹ Easting:	
	San	aple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
0	1637096	92		Brown to orange brown, fine SAND, some Silt, trace medium Sand, trace organic matter, dry to slightly moist, loose	2.5
†	1637097	92		Light yellowish brown, fine SAND, trace medium Sand, slightly moist, loose	1.7
+4	1637098	62		Light yellowish brown, fine to medium SAND, trace coarse Sand, moist to wet, loose	45.6
† † †	1637099			·	0.0
+8	1637100	83		Light olive brown to orange brown, fine(+) to medium SAND, trace coarse Sand, wet, loose, slight coarsening downward	0.0
†	1637101	83			0.0
†12 †	1637102	62		Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose	1.0
†	1637103				0.0
16				Bottom of Boring at 16'	
20					
-24				·	
Comments	<u> </u>	 l			1

LOUREIRO ENGINEERING ASSOCIATES, PC

100 Northwest Drive, Plainville, Connecticut, 06062, Phone(203)747-6181 FAX (203)747-8822

Printed On: 1/20/1998

Project: SA Fire Training Area B LEA Comm No: 68V7081

Client: Pratt & Whitney East Hartford Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geoprobe MC Sampling Method: Macro Core

Groundwater Observations:

Depth:

Hours

Start Date 07/02/97 **End Date** 07/02/97

Boring ID

SA-SB-127

J. Trzaski

D. Brisson

Logged By: J. Trzas Drilling Foreman: Drill Rig: GP-5400 Surface Elevation:

Depth: Depth:		At: At:	Hours	Fasting:	
	San	npie Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1637104	54		Brown to yellowish brown, SILT with fine Sand, trace medium Sand, trace organic matter, dry to slightly moist, loose	0.0
†	1637105	54		Yellowish brown, fine SAND, trace Silt, trace medium Sand, slightly moist, loose	0.2
+4	1637106	17		Yellowish brown, fine to medium SAND, moist, loose, process stone Cobble lodged in tip	0.0
<u> </u>				No Recovery	
+8	1637108	92		Light olive brown, fine SAND, wet, loose	0.0
‡	1637109	92		Yellowish brown, fine to medium SAND, trace coarse Sand, iron staining throughout, wet, loose	0.0
+12	1637110	75		Orange brown, medium to fine SAND, trace coarse Sand, wet, loose	0.0
‡	1637111	75		Light olive brown, fine to medium SAND, trace(-) coarse Sand, wet, loose	0.4
+16				Bottom of Boring at 16'	
20					
24					
+			<u> </u>		

Start Date

SA Fire Training Area B Project: Boring ID LEA Comm No: 68V7081 07/03/97 Client: Pratt & Whitney **End Date** SA-SB-130 Location: East Hartford, CT 07/03/97 Logged By: J. K Drilling Foreman: **Drilling Contractor:** LEA J. Klapheke Drilling Method: Geoprobe MC D. Brisson Drill Rig: Sampling Method: **GP-5400** Macro Core Surface Elevation: **Groundwater Observations:** Hours Hours Depth: At: Northing: Easting: Depth: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Blows Depth Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1637128 81 19.3 6": Topsoil; 33": Brown to dark brown, fine(+) to coarse SAND, some Silt, trace fine Gravel, slightly moist, loose 1637129 10.5 1637130 75 17.2 Brown to dark yellowish brown, fine to coarse SAND, trace(-) Silt, moist to wet $(5'\pm)$, loose 1637131 15.7 8 1637132 75 13.0 Brown, fine to coarse(+) SAND and fine GRAVEL, wet, slightly dense 1637133 5.3 1637134 5.9 As Above 1637135 8.9 Printed On: 1/22/1998 16 Bottom of Boring at 16' 20 24 Comments:

Project:	SA Fire Tra	ining Ar	ea B	Start Date Boring 1	D
LEA Com	m No: 68' ratt & Whit	V7081	Hartford	07/03/97	
Location:	East Harti	ford, CT	riaitioid	07/03/97 SA-SB-1	31
Drilling Co	ontractor:	LEA		Logged By: J. Klapheke	
Drilling M	ethod: G	eoprobe	MC	Drilling Foreman: D. Brisson	
Sampling I	Method: ter Observat	Macro (Core	Drill Rig: GP-5400 Surface Elevation:	
Depth:		uous. At:	Hours	Northing:	
Depth:		kt:	Hours	Easting:	
	Sam	pie Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1637136	100		10": Top soil; 12": Brown, fine SAND, some fine to coarse Gravel, dry, loose; 26": Brown to dark brown, fine to medium SAND with Silt, moist, dense	0.0
‡	1637137				0.0
1.					
T *	1637138	79	į	32": Brown to dark reddish brown, fine to medium SAND, trace coarse Sand, trace(-) fine Gravel, moist, loose; 6": Grey brown, fine to medium SAND, wet, loose	0.0
† †	1637139				0.0
+8	1637140	75		Brown to grey brown, fine to coarse(+) SAND and fine GRAVEL, wet, loose, occasional iron staining	0.0
Ī	1637141			·	0.0
12.	1637142	79		As Above	0.0
†	1637143				0.0
+16		 			<u> </u>
†				Bottom of Boring at 16'	
20					
‡					
124					
Į.					
Comments	s:				

Project: SA Fire Training Area B
LEA Comm No: 68V7081
Client: Pratt & Whitney
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: Geoprobe MC

Drilling Contractor: LEA
Drilling Method: Geoprobe MC
Sampling Method: Macro Core
Groundwater Observations:

Depth:

At: At: Hours Hours

Start Date 07/03/97 End Date 07/03/97

Boring ID SA-SB-132

Logged By: J. Klapheke
Drilling Foreman: D. Brisson
Drill Rig: GP-5400

Drill Rig: GP-546 Surface Elevation:

Northing: Easting:

Sample Information Sample Information Sample Description	ļ	Easting:	Hours	Lt:	A	Depth:
Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 8": Top soil; 10": Brown, fine SAND, dry, loose; 25": Brown to dark brown, fine to medium SAND with Silt, slightly moist to moist, slightly dense 1637146 83 Brown to light greyish brown, fine to medium SAND, trace coarse Sand, moist, loose 1637147 8 1637148 79 8": Brown, fine to medium SAND with Silt, trace fine Gravel, wet, slightly dense 1637149 1637150 75 Grey brown, fine to coarse SAND and fine GRAVEL, wet, loose Bottom of Boring at 16']	Sample Description	ation	ple Inform	Sam	
to dark brown, fine to medium SAND with Silt, slightly moist to moist, slightly dense 1637146 83 Brown to light greyish brown, fine to medium SAND, trace coarse Sand, moist, loose 1637147 8 8": Brown, fine to medium SAND with Silt, trace fine Gravel, wet, slightly dense 1637149 Grey brown, fine to coarse SAND and fine GRAVEL, wet, loose 1637151 Bottom of Boring at 16'	(ppm)	Moisture, Sorting, Sphericity, Angularity,	Blows /6"	Recovery (%)	Sample No.	
Brown to light greyish brown, fine to medium SAND, trace coarse Sand, moist, loose 1637147	0.0	to dark brown, fine to medium SAND with Silt, slightly		90	1637144	ļ
1637147 8 1637148 79 8": Brown, fine to medium SAND with Silt, trace fine Gravel, wet, slightly dense 1637149 12 1637150 75 Grey brown, fine to coarse SAND and fine GRAVEL, wet, loose 18 Bottom of Boring at 16'	0.0	·			1637145	‡
8 1637148 79 8": Brown, fine to medium SAND with Silt, trace fine Gravel, wet, slightly dense 1637149 75 Grey brown, fine to coarse SAND and fine GRAVEL, wet, loose 1637151 Bottom of Boring at 16'	0.0	Brown to light greyish brown, fine to medium SAND, trace coarse Sand, moist, loose		83	1637146	+4
1637148 79 8*: Brown, fine to medium SAND with Silt, trace fine Gravel, wet, slightly dense 1637149 1637150 75 Grey brown, fine to coarse SAND and fine GRAVEL, wet, loose 1637151 Bottom of Boring at 16'	0.0	l.			1637147	‡
12 1637150 75 Grey brown, fine to coarse SAND and fine GRAVEL, wet, loose 1637151 Bottom of Boring at 16'	0.0	8": Brown, fine to medium SAND with Silt, trace fine Gravel, wet, slightly dense		79	1637148	+8 +
1637151 Grey brown, fine to coarse SAND and fine GRAVEL, wet, loose Bottom of Boring at 16'	0.0				1637149	+
Bottom of Boring at 16'	0.0			75	1637150	12
Bottom of Boring at 16'	0.0		·		1637151	+
20	<u> </u>	Bottom of Boring at 16'				+16
-20 -20						†
+						20
			:			- 24
† 24 † †						724
Comments:	1	·	<u> </u>	-L	5:	Comments

GEOLOGIC BORING LOG Page 1 of 1 Project: SA Fire Training Area B **Start Date** Boring ID 07/07/97 End Date **LEA Comm No:** 68V7081 Client: Pratt & Whitney East Hartford Location: East Hartford, CT **SA-SB-133** 07/07/97 Logged By: J. Trzas Drilling Foreman; Drill Rig: GP-5400 J. Trzaski **Drilling Contractor:** D. Brisson **Drilling Method:** Geoprobe MC Sampling Method: Macro Core Surface Elevation: Groundwater Observations: Northing: Depth: At: Hours At: Hours Easting: Depth: Sample Information Sample Description

	2411	apie Informa	1,011	Sample Description	1
Elevation/ Depth	Sample No.	Recovery (X)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1637160	88		Top 6": Brown, fine SAND, some Silt, trace organic matter, dry, loose; Bottom 15": Brownish yellow, fine SAND, trace medium Sand, dry, loose	1.6
‡	1637161 1637162	88		Top 14": Same as last 15", slightly moist, moderately dense; Bottom 7": Yellowish brown, fine SAND, little Silt, trace medium Sand, slightly moist, moderately dense	1.5
+4	1637163	58		Light yellowish, fine(+) to medium SAND, moist, loose, wet at bottom	2.3
<u> </u>	1637164	58			1.8
-8	1637165	67		Top 6": Greyish brown, fine SAND, trace medium Sand, wet, loose; Bottom 26": Yellowish brown to greyish brown, fine to coarse SAND, wet, loose	1.9
	1637166				2.6
+12 +	1637167	67		Greyish brown to yellowish brown, fine(+) to coarse SAND, trace fine Gravel (peasize) wet, loose, slight coarsening downward	2.3
†	1637168				1.5
†16 †				Bottom of Boring at 16'	
20					
+					
24					
I	<u> </u>			<u> </u>	<u> </u>

A-SB-133

Project: SA Fire Training Area B Start Date Boring ID LEA Comm No: 68V7081
Client: Pratt & Whitney East Hartford 07/07/97 **End Date SA-SB-134** Location: East Hartford, CT 07/07/97 Logged By: J. T Drilling Foreman: **Drilling Contractor:** LEA J. Trzaski Drilling Method: Geoprobe MC D. Brisson Drill Rig: **GP-5400** Sampling Method: Macro Core **Groundwater Observations:** Surface Elevation: Depth: At: Hours & Northing: Hours Depth: At: Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Denth Blows 6° Sample No. (な) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1637169 83 Top 2": Organic debris; Middle 8": Brown, fine SAND, some 1.3 Silt, trace organic matter, dry, loose 83 1637170 Bottom 30": Yellowish brown, fine SAND, trace medium 1.3 SAND, trace Silt, slightly moist, loose to moderately dense 58 1637171 1.5 Light yellowish brown, fine(+) to very fine SAND, trace medium SAND, slightly moist, loose 1637172 58 1.1 Light yellowish brown, fine to medium SAND, moist, loose, coarsening downward to medium to fine SAND 1637173 62 1.6 Greyish brown, fine to coarse SAND, wet, loose 1637174 62 1.7 Light olive brown, fine to medium SAND, trace(-) coarse SAND, wet, loose 12 1637175 54 2.9 Light olive brown to yellowish brown, fine to medium SAND, trace coarse Sand, wet, loose 1637176 54 3.1 Printed On: 1/20/1998 16 Bottom of Boring at 16' 20 24 Boring No: SA-SB-134 Comments:

LEA Com	ratt & Whit	V7081 ney Eas	t Hartford	tart Date Boring ID	
Drilling Co Drilling M Sampling 1	ontractor: lethod: G Method: ter Observa	LEA seoprobe Macro (tions: \t: \t:	MC Core Hours Hours	Logged By: J. Trzaski Drilling Foreman: D. Brisson Drill Rig: GP-5400 Surface Elevation: Northing: Easting:	
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
+	1637177	83		Top 10": Dark yellowish brown SILT and fine SAND, trace organic matter, dry loose; Bottom 11": Yellowish brown fine SAND, trace medium Sand, slightly moist, loose	2.5
† † †	1637178	83		Top 10": Same as last 11"; Bottom 11": Brownish yellow, fine SAND, little Silt, trace medium Sand, slightly moist, medium dense	2.9
1 1 4	1637179	62		Top 10": Light yellowish brown, very fine to fine SAND, moist, loose; bottom 5": Light yellowish brown, fine SAND, trace medium SAND, moist, loose	2.4
† † +	1637180	62		Same as last 5", moist to wet	1.7
-8	1637181	79		Top 10": Brown fine SAND, trace medium Sand, wet, trace organic matter, top 4"; Bottom 5": Light olive brown, fine to medium SAND, trace coarse Sand, wet, loose	4.6
† † †	1637182	79		Same as last 9"	3.0
+12 +	1637183	62		As Above	3.0
† †	1637184	62		Yellowish brown, fine to coarse SAND, trace fine Gravel (pea size), wet, loose	4.2
16 				Bottom of Boring at 16'	
-24					
Comment	6:				

Project: SA Fire Training Area B
LEA Comm No: 68V7081
Client: Pratt & Whitney East Hartford
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: Geoprobe MC
Sampling Method: Macro Core
Groundwater Observations:
Depth: At: Hours
Depth: At: Hours

Start Date 07/07/97 End Date 07/07/97

Easting:

Boring ID

SA-SB-136

Logged By: J. Trzaski
Drilling Foreman: D. Brisson
Drill Rig: GP-5400
Surface Elevation:
Northing:

Depui:	,	AL:	пошъ	÷ . rasting:	
	San	ple Inform	ation	Sample Description	}
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1637185	88		Top 8": Dark yellowish brown, fine SAND and SILT, trace organic matter, dry, loose; Bottom 13": Yellowish brown, fine SAND, trace medium SAND, slightly moist, loose	2.0
	1637186	88		Top 10": Same as last 13", cobble at 11"; Bottom 11": Brownish yellow, fine SAND, little Silt, trace medium SAND, slightly moist, moderately dense	2.5
+4	1637187	58		Light yellowish brown, fine SAND, little medium Sand, moist to wet, loose, wet at bottom	1.8
<u> </u>	1637188	58			1.9
8	1637189	83		Top 4": Brown, fine SAND, trace medium SAND, trace organic matter, wet, loose; Bottom 16": Light olive brown, fine to medium SAND, wet, loose	0.8
‡	1637190	83		As Above, trace coarse SAND	2.4
+12	1637191	58		Yellowish brown, fine to medium SAND, trace coarse SAND, wet, loose, slightly coarsening downward	3.0
	1637192	58			3.2
16				Bottom of Boring at 16'	
+					
20					
+24					
† †				, and the second	
Comments	:				L

Project: SA Fire Training Area B Start Date Boring ID LEA Comm No: 68V7081 07/08/97 Client: Pratt & Whitney **End Date SA-SB-137** Location: East Hartford, CT 07/08/97 Logged By: J. Trzas Drilling Foreman: Drill Rig: GP-5400 Surface Elevation: **Drilling Contractor:** J. Trzaski Drilling Method: Geoprobe MC D. Brisson Sampling Method: Macro Core **Groundwater Observations:** Northing: Depth: Depth: At: Hours Easting: At: Hours

evation/		Sample Information		Sample Description		
pth	Sample No.	Recovery (X)	Blows	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
ļ°	1637198	88		Brown to yellowish brown fine SAND, little Silt, trace medium Sand, trace organic matter, dry to slightly moist, loose	4.1	
†	1637199	88		Light olive brown, fine to very fine SAND, trace medium SAND, slightly moist to moist, loose	7.6	
+4	1637200	75		Top 24": Yellowish brown, fine(+) to medium SAND, trace coarse SAND, wet, loose; Bottom 12": Light olive brown, fine SAND, trace(-) medium SAND, micaceous, wet,	3.6	
†	1637202	75		loose	2.2	
-8	1637203	100		Top 34": Light olive brown to yellowish brown, fine SAND, trace medium SAND, wet loose, iron staining 20 to 30"	1.1	
† †	1637204	100	·	Bottom 14": Yellowish brown, fine to coarse SAND, wet, loose	2.4	
-12	1637206	58		Top 12": Reddish brown, fine to medium SAND, trace coarse SAND, wet, loose; Bottom 16": Grey CLAY, trace very fine Sand and Silt, moist, moderately dense, laminated	2.4	
† †	1637206	58			1.2	
16				Bottom of Boring at 16'		
20						
-24						
‡						

Project: SA Fire Training Area B LEA Comm No: 68V7081 Start Date **Boring ID** 07/08/97 Client: Pratt & Whitney **End Date SA-SB-138** Location: East Hartford, CT 07/08/97 **Drilling Contractor:** LEA Logged By: J. Trzaski Drilling Foreman:
Drill Rig: GP-5400
Surface Elevation: Drilling Method: Geopre Sampling Method: Macr Groundwater Observations: Geoprobe MC D. Brisson Macro Core Depth: At: Hours Northing: Easting: Depth: At: Hours

Deptili.	•				
	San	ple Informati	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1637207	75		Top 10": Brown fine SAND, some Silt, trace organic matter, trace medium SAND, dry, loose; Bottom 8": Brownish yellow, fine SAND, trace Silt, trace medium	3.9
‡ ‡	1637208	75		Sand, slightly moist, loose Brown to light olive brown, fine(+) to very fine SAND, trace medium SAND, slightly moist to moist, loose	3.3
+4	1637209	75		Top 26": Yellowish brown, fine(+) to medium SAND, moist to wet, loose, iron staining at 22 to 26"; Bottom 10": Light olive brown, fine SAND, trace(-) medium SAND, wet, loose	2.2
†	1637210	75			2.7
+8	1637211	92		Top 14": Light olive brown, fine SAND, trace medium SAND, wet, loose; Middle 14": Yellowish brown, fine(+) to coarse SAND, wet, loose	1.6
‡	1637212	92		Bottom 16": Strong brown fine to medium SAND, wet, loose	2.0
+12	1637213	96		Grey CLAY, little Silt and very fine Sand, wet, moderately dense, laminated, 6" layer of Silt at 10 to 16"	0.0
† †	1637214	96			0.4
18				Bottom of Boring at 16'	
20					
† † †					:
+	1				
+24					

LEA

SA Fire Training Area B Project: LEA Comm No: 68V7081 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geoprobe MC Sampling Method: Macro Core

Groundwater Observations: Depth:

Hours

Start Date 07/08/97 **End Date** 07/08/97

Boring ID

SA-SB-139

J. Trzaski D. Brisson

Logged By: J. Trzas Drilling Foreman: Drill Rig: GP-5400 Surface Elevation:

Elevation/ Depth	Sample No. 1637215	Recovery (2)	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 8": Brown, fine SAND, some Silt, trace organic matter, dry, loose; Bottom 9": Brownish yellow fine SAND, trace Silt, trace medium Sand, slightly moist, loose	(ppm) 0,1
Depth	1637215 1637216	71	Blows /6"	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness Top 8": Brown, fine SAND, some Silt, trace organic matter, dry, loose; Bottom 9": Brownish yellow fine SAND, trace Silt, trace medium Sand, slightly moist, loose	
-4	1637216			matter, dry, loose; Bottom 9": Brownish yellow fine SAND, trace Silt, trace medium Sand, slightly moist, loose	0,1
1		71			
+4	1637217			Light yellowish brown, fine SAND, grading to fine to medium SAND, slightly moist to moist, loose	1.4
<u> </u>		71		Yellowish brown, fine to medium SAND, trace coarse SAND, wet, loose, orange, iron staining at 24 to 34"	0.9
+	1637218	71			1.7
-8	1637219	92		Light olive brown, fine SAND, trace medium SAND, wet, loose	0.2
‡	1637220	92		As Above, grading to fine to medium SAND, trace coarse SAND, wet, loose	0.0
+12 +	1637221	100		Top 3": Reddish brown fine to coarse SAND, wet, loose; Bottom 45": Grey CLAY, little Silt and very fine Sand, wet, moderately dense, laminated	0.2
†	1637222	100			0.0
+16 +				Bottom of Boring at 16'	
20					
24					
<u> </u>					
Comments	:			•	

Project: SA Fire Training Area B
LEA Comm No: 68V7081
Client: Pratt & Whitney East Hartford Location: East Hartford, CT **Drilling Contractor:** Drilling Method: Geopre Sampling Method: Macro Groundwater Observations: Geoprobe MC Macro Core Depth:

Hours

Start Date 07/08/97 **End Date** 07/08/97

Boring ID SA-SB-140

J. Trzaski Logged By: Drilling Foreman: Drill Rig: GP-54 Surface Elevation: D. Brisson **GP-5400**

Depth:		At:	Hours	Easting:	
	San	nple Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1637223	88		Top 10": Brown, fine SAND, some Silt, trace organic matter, dry, loose; Middle 18": Brownish yellow, fine SAND, trace Silt, trace medium Sand, slightly moist to	3.5
T	1637224	88		moist, moderately dense Bottom 14": Light yellowish brown, fine(+) to medium SAND, grading to fine SAND, moist, loose	3.8
+4	1637225	58		Top 12": Greyish brown, fine to medium SAND, wet, loose; Middle 8": Greyish brown, fine to very fine SAND, wet, loose	3.3
‡	1637225	58		Bottom 8*: Strong brown, fine to medium SAND, wet, loose	3.3
+8	1637227	96	•	Yellowish brown to stong brown, fine(+) to coarse SAND, wet, loose, iron staining at 10 to 23"	2.4
†	1637228	96	·	Light olive brown, fine to very fine SAND, grading to fine SAND, wet, loose	1.3
+12	1637229	100		Top 10": Strong brown, fine(+) to medium SAND, wet, loose; Bottom 38": Grey CLAY, little Silt, very fine Sand, wet, moderately dense, laminated	0.7
‡	1637230	100			0.4
+16 +				Bottom of Boring at 16'	·
20					
† † †					
24					
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Project: LEA Com	SA Fire Tre	aining Are	ea B	4.		Start Da 07/08/9		Boring I	D
	ratt & Whit	ney East	Hartford	(-		End Da 07/08/9	te	SA-SB-1	41
Drilling Control of the Drilling Manual of the Drilling Manual of the Drilling Manual of the Drilling Manual of the Drilling Control of the Drilling Control of the Drilling Control of the Drilling Control of the Drilling Control of the Drilling Control of the Drilling Control of the Drilling Control of the Drilling Control of the Drilling Control of the Drilling Control of the Drilling Manual of the Drilling M	ontractor: lethod: G Method: iter Observa	LEA seoprobe Macro C tions:	Core	N)	Logge Drilli Drill Surfa	ed By: J. 7 ng Foreman: Rig: GP-5 ce Elevation:	400	
Depth: Depth:		\t: \t:	Hours Hours			North Easti			
Depta.		ple Informat				Sample Descri			
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Moistu	ire, Soi	rain Size, S rting, Spher	econdary Gr icity, Angul ensity, Cohe	arity,	(ppm)
†°	1637231	88		Top 8": Brownis organic matter, o trace Silt, trace	dry, lo mediur	ose; Next	10": Brown	, fine SAND,	3.9
!	1637232	88		moderately dens Nest 12": Brown medium Sand, m brown, fine SAN	nish ye noist, l	oose; Bott	om 12": Lig	ht yellowish	3.9
T ⁴	1637233	62		Yellowish brown SAND, trace coa	to gr	eyish brow	n, fine(+) t		4.8
†	1637234	62		Greyish brown, staining at 27 to		medium S	AND, wet,	loose, iron	5.2
+8				No Recovery - p	oint lo	dged in Ma	acro tube		
<u> </u>				No Recovery - p	oint lo	dged in M	acro tube		
12	1637237	92		Strong brown, fi loose, slightly co				ND, wet,	1.4
‡	1637238	92	-	Grey CLAY, little laminated	e Silt a	and very fir	ne Sand, we	t, loose,	1.1
+18				Bottom of Boring	g 16'				
20									
24								·	
Ī									
Comment	s:			L			 		!
						·			

Project:	SA Fire Tra	ining Are	ea B		Start Date	Boring II	,
LEA Com	n No: 68'	V7081			07/09/97	DVIME II	•
	ratt & Whit				End Date	SA-SB-14	12
Location:	East Hartf				07/09/97	1	12
Drilling Co	ntractor:	LEA		A Company of the Comp	Logged By: J. k	Clapheke	
Drilling M	ethod: G	eoprobe	بحير	a land	Drilling Foreman:	D. Brisson	
Sampling l	Method:	Macro C	Core		Drill Rig: GP-5		1
	ter Observat		_ <i>_</i> & [©]		Surface Elevation:		-
Depth:		kt:	Hours	·羞	Northing:		
Depth:	A	kt:	Hours	7	Easting:		1
	Sam	ple Informat	tion ``		Sample Description		
Elevation/				Color, Pri	mary Grain Size, Secondary Gr	ain Sizes.	1
Depth	Sample No.	Recovery (火)	Blows /6"		ure, Sorting, Sphericity, Angul		(ppm)
	1 100.	`~'	~ I	Sedime	ntary Structures, Density, Cohe	siveness	(bbein)
10	1637243	79					1.6
l †	1	1 " 1	1		28": brown, fine to medium S	AND, ary to	""
†		1 1	İ	slightly moist,	oose		
l İ							
I	1637244	79				•	1.9
I	İ	1					!
1 1			,]				
1 4	L	1-2-1					
1 1	1637245	69	1	Brown to grey	brown, medium to coarse SA	ND with fine	1.3
ļ ļ		1 1	j		o wet, loose, becoming reddis	sh brown,	
+	İ		1	bottom 8"	-		i 1
1 +	1637246	69	ŀ				1.0
1 †	İ	1 1		•			1
1 1	ł						1
l I.		1					
l T°	1637247	83	1	16": As Above	; 24": Grey brown, fine to me	edium SAND.	1.4
l 1		1 1		wet, loose	, ,	,	
l ↓		1 1		,			
l +	1637248	83	İ				0.9
1 +	1037240	65					0.5
) +		1 1					
i †		1 1					
十12	1637249	83		20". Proum to	red brown, fine to coarse SA	ND tropp fine	0.3
1 †		"	1	Gravel, wet, lo	red brown, line to coarse SA	ND, uace mie	"
II				Glavel, Wel, IO	026		
l I		1					
↓	1637250	83		20": Grey, CLA	AY and SILT, trace fine Sand,	wet, dense,	0.3
1 +	ļ	1 1		laminated	•	, ,	1 1
l +							
+ 16	ļ	+		5 (5 .	. 401		1
 		1		Bottom of Bori	ng at 16'		
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Comments	5:						
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Project: SA Fire Training Area B LEA Comm No: 68V70 Client: Pratt & Whitney 68V7081 Location: East Hartford, CT LEA

Start Date 07/09/97 **End Date** 07/09/97

Boring ID **SA-SB-143**

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro Core **Groundwater Observations:**

At:

Hour

Logged By: J. Klapt Drilling Foreman: Drill Rig: GP-5400 Surface Elevation: J. Klapheke D. Brisson

			Hours	Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1637251	83		6": Top soil; 8": Yellow brown, fine to medium SAND, slightly moist, loose	0.8
‡	1637252	83		26": Brown, fine(+) to medium, slightly moist to moist, loose	1.0
+4	1637253	76		16": Light brown, fine to coarse(+) SAND, trace fine Gravel, wet, slightly dense	0.0
†	1637254	75		2": Dark red brown, fine to coarse(+) SAND and fine Gravel, wet, loose; 18": reddish brown, fine to coarse SAND, trace fine Gravel, wet, loose	0.4
+8	1637255	96		22": As Above; 24": Grey brown, fine to medium SAND, wet, loose	0.0
†	1637256	96			0.0
12	1637257	100		22": As Above; fine to coarse SAND; 14": Reddish brown,	0.0
† † †	1637258	100		fine to coarse SAND, wet, loose; 12": Grey, CLAY with SILT, trace fine Sand, laminated, wet, dense	0.0
16				Bottom of Boring 16'	
20					
24				·	
,	ł	1 1			1

Project: SA Fire Training Area B LEA Comm No: 68V7081 Start Date Boring ID 07/10/97 Client: Pratt & Whitney East Hartford Location: East Hartford, CT **End Date SA-SB-146** 07/10/97 Drilling Contractor: Drilling Method: Sampling Method: Logged By: J. Klapi Drilling Foreman: Drill Rig: GP-5400 J. Klapheke Geoprobe D. Brisson Macro Core **Groundwater Observations:** Surface Elevation: Depth: Depth: Northing: Hours Hours Easting: At:

ļ ———	Sam	ple Informa	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
•	1637278	75		10": Top soil; 2": Brown, coarse GRAVEL with fine to medium Sand, slightly moist, loose	1.4
I	1637279	75		24": Brown, fine to medium SAND, slightly moist, loose	8.0
†** 	1637280	71		Brown to grey, fine to coarse SAND with fine GRAVEL, wet, loose	1.0
1	1637281	71			0.7
+8 + +	1637282	83	, , , , , , , , , , , , , , , , , , ,	Brown to grey brown, brown fine to coarse SAND, little fine Gravel, wet, loose, septic odor	0.8
 	1637283	83			0.8
+12 + +	1637284	96		20": Grey fine GRAVEL, trace fine to coarse(+) Sand, wet, loose, septic odor	0.9
	1637285	96		24": Grey to black to reddish brown, fine to medium SAND, wet, slightly dense, septic odor; 4": Grey CLAY, some Silt, trace fine Sand, wet, dense, laminated	0.7
+16				Bottom of Boring at 16'	
†					
20					
24					
Comments	: :		. "	<u> </u>	1

Printed On: 1/20/1998

Start Date Project: SA Fire Training Area B Boring ID 68V7081 LEA Comm No: 07/10/97 Client: Pratt & Whitney East Hartford **End Date SA-SB-147** Location: East Hartford, CT 07/10/97 J. Klapheke Logged By: **Drilling Contractor:** Geoprobe Drilling Foreman: D. Brisson Drilling Method: Drill Rig: GP-5400 Sampling Method: Macro Core Surface Elevation: Groundwater Observations: Depth: At: Hours Northing: Depth: At: Hour: Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample __No. ecover (2) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1637286 88 10": Top soil; 32": Brown to yellow brown, fine to medium 1.1 SAND, slightly moist to moist, loose 1637287 88 0.2 75 0.4 1637288 Brown to dusky red, fine to coarse(+) SAND and fine GRAVEL, wet, loose 0.2 1637289 75 1637290 50 0.3 Brown, fine to coarse SAND, wet, loose 1637291 50 0.0 12 1637292 0.0 20": Reddish brown, fine GRAVEL, little fine to coarse(+) Sand, wet, loose Printed On: 1/20/1998 0.0 1637293 79 17": Reddish brown, fine to medium SAND, wet, slightly dense; 1": Grey CLAY, trace fine Sand, wet, dense, laminated 6 Bottom of Boring at 16' 20 Comments:

Project: SA Fire Training Area B **Start Date** Boring ID **LEA Comm No: 68V7081** 07/10/97 Client: Pratt & Whitney **End Date SA-SB-148** Location: East Hartford, CT 07/10/97 **Drilling Contractor: LEA** Logged By: J. Klapheke Geoprobe Drilling Foreman: D. Brisson Drilling Method: **GP-5400** Sampling Method: Macro Core Drill Rig: Groundwater Observations: Surface Elevation: Northing: Depth: At: Hours Hours Easting: Depth: At: Sample Information Sample Description Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1637294 83 0.0 10": Top Soil; 30": Yellow brown, fine to medium SAND, slightly moist to moist, loose 1637295 83 0.0 1637296 62 0.0 Brown to grey brown, fine to coarse SAND, little fine Gravel, wet, loose, occasional iron staining, occasional iron staining 1637297 62 0.0 1637298 0.0 Brown to strong brown, fine to coarse SAND, trace fine Gravel, wet, loose 1637299 75 0.0 12 1637300 96 0.0 42": Brown to dark reddish brown, fine to coarse SAND, with fine Gravel, wet, slightly dense 1637301 96 0.0 4": Grey CLAY, trace Silt, trace fine Sand, wet, dense, laminated Bottom of Boring at 16' 20 Comments:

Depth:		At:	Hours	Easting:	
	San	nple Informa		Sample Description	ļ <u> </u>
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1637304	76		Top 1": Organic debris and matter; Middle 6": Brown SILT with fine SAND, trace fine Gravel, trace organic matter, dry, loose	8.9
-	1637305	75		Bottom 29": Yellowish Brown, fine SAND, trace medium SAND, trace Silt, slightly moist to moist, loose	6.2
+4	1637306	58		Yellowish Brown, fine(+) to medium SAND, moist to wet, loose, occasional iron staining, wet at 14"	6.1
1	1637307 1637308	58			4.1
	1637309	96		Yellowish brown to orange brown, fine(+) to medium fine SAND, trace(-) medium SAND, wet, loose	3.8
‡	1637310	96			2.5
12	1637311	92		Top 1": As Above, light olive brown; Middle 22": Light olive brown to reddish brown, fine to medium SAND, trace coarse SAND, wet, loose	2.3
†	1637312	92		Bottom 2": Grey CLAY, trace Silt and very fine Sand, wet, loose	1.5
+16 + + + +				Bottom of Boring at 16'	
20					
<u> </u>					
+24					
Comments	3:		<u> </u>		

Project: SA Fire Training Area B LEA Comm No: 68V7081 Start Date Boring ID 07/11/97 Client: Pratt & Whitney East Hartford **End Date SA-SB-150** East Hartford, CT Location: 07/11/97 Logged By: J. Trzas Drilling Foreman: Drill Rig: GP-5400 **Drilling Contractor:** LEA J. Trzaski Drilling Method: Sampling Method: Geoprobe MC D. Brisson Macro Core Surface Elevation: Groundwater Observations: Depth: Hours Northing: Depth: At: Hours Easting:

æptn:		\t:	Hours	rasung:	
	Sam	ple Informa	ation	Sample Description	
levation/ epth	Sample No.	Recovery (%)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	{ppm
† ° †	1637313 1637314	88		Top 2": Organic, debris; Middle 12": Brown fine SAND and SILT, trace medium Sand, trace organic matter, dry, loose; Bottom 28": Yellowish brown, fine SAND, trace medium SAND, slightly moist, loose	4.5 3.4
+4	1637315	62		Yellowish brown, fine to medium SAND, trace(-) coarse SAND, moist to wet, loose, wet at 12"	2.6
‡	1637316	62			1.7
+8 1	1637317	96		Light olive brown to yellowish brown, fine(+) to very fine SAND, trace medium SAND, wet, loose	2.4
†	1637318	96		Orange brown, fine(+) to medium SAND, wet, loose	1.4
12	1637319	92		Top 1": As Above, light olive brown; Next 20": Light olive brown to strong brown, fine to medium SAND, trace coarse SAND, wet, loose	1.0
† †	1637320	92		Next 11": Light olive brown, fine(+) to medium SAND, wet, loose; Bottom 1": Grey varved CLAY, trace very fine Sand and Silt, wet, loose	0.7
+ 16 + + + +				Bottom of Boring at 16'	
† † †					
- 24					
Comments				. <u> </u>	

Project: SA Fire Training Area B LEA Comm No: 68V7081 Client: Pratt & Whitney Location: East Hartford, CT LEA

Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:

Depth: NM Hours At: Hours Depth: At:

Start Date 07/14/97 **End Date** 07/14/97

Boring ID

SA-SB-152

Logged By: J. Klapheke Drilling Foreman: D. B Drill Rig: Geoprobe 540 Surface Elevation: D. Brisson Geoprobe 5400

Northing: Easting:

Depth: Elevation/ Depth	Sam	ple Informati	OD .	Sample Description	
		, ,			1
•	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
·	1638950	83		6": Topsoil; 34": Dark yellow brown, fine to medium SAND, slightly moist to moist, loose	1.3
+	1638951			-	1.7
+4	1638952	79		Brown to black, fine to coarse SAND, some fine Gravel, wet, slightly dense, slight septic odor	1.3
† †	1638953 1638954			•	1.6
 8 	1638955	75		Brown to grey brown, fine to coarse(+) SAND and fine GRAVEL, wet, slightly dense, septic odor	1.9
†	1638956				1.6
12	1638967	79		26": Grey, fine to coarse SAND and fine GRAVEL, wet, loose, septic odor; 6": Yellow brown, fine to medium SAND, wet, slightly d4ense, thickly laminated; 6": Grey, CLAY,	1.6
<u> </u>	1638958			trace fine SANd, wet, dense, thickly laminated	1.2
16	 	╁╌╌┼		Bottom of Boring at 16'	
<u> </u>					
20					
†					
†					
24					
<u>t</u>	<u> </u>				<u> </u>
Comment	S:				

SA Fire Training Area B Project: LEA Comm No: 68V7081 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: LEA Geoprobe

Sampling Method: Macr Groundwater Observations: Macro Core

Depth: NM

At:

Hours

Start Date 07/14/97 **End Date** 07/14/97

Boring ID

SA-SB-153

Logged By: J. K Drilling Foreman: J. Klapheke D. Brisson Drill Rig: Geopr Surface Elevation: Geoprobe 5400

Northing:

Depth:	A	lt:	Hours	Easting:	
	Sam	ple Informa	etion	Sample Description	· · · · ·
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
+	1638959	83		8": Topsoil; 32": Brown to dark yellow brown, fine to coarse SAND, slightly moist to wet, loose	1.6
†	1638960			•	0.9
14	1638961	75		Brown, fine to coarse SANd, wet, trace fine Gravel, loose, becoming grey at bottom 12"	1.1
I I	1 63 8962				1.7
8	1638963	75		Grey to brown, fine to coarse SAND and fine GRAVEL, wet, loose	1.1
	1638964				1.0
-12	1638965	83		20": As Above; 10": Brown to strong brown, fine to medium SAND, wet, slightly dense; 10": Grey, CLAY, trace Silt, trace fine SAND, wet, dense, laminated	1.3
1	1638966			Silt, trade fille SAND, wet, delise, familiated	1.1
16				Bottom of Boring at 16'	
†					
20					
‡					
-24					
Comments	3 :				

Printed On: 1/22/1998

LEA Comr	Tank Traile n No: 68'	V7068	o Alea Add	07/17/97 Boring 1D			
lient: Pi ocation:	ratt & White East Hartf	ney ford, CT		End Date 07/17/97 SA-SB-154			
rilling Co rilling Mo ampling N	ethod: G Method: ter Observat	LEA eoprobe Macro (Core Hours Hours	Logged By: D. Brisson Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:			
-	Sam	ple Informa	tion	Sample Description			
evation/ :pth	Sample No.	Recovery (2)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
10	1638793	96		Top 6": Red brown, fine to medium SAND, trace(+) coarse Sand and Gravel, dry, loose; Bottom 16: Dark brown, fine SAND, trace(+) medium Sand, trace(+) Silt, organics, dry,	0.0		
	1638794	96		Top 3": As Above, bottom 16"; Bottom 21": Light brown, fine SAND, trace(-) medium Sand, dry, dense			
+4	1638795 1638796	83	-	Grey brown, fine SAND, moist, loose	0.0		
<u> </u>	1638797	83		Top 10": As Above; Bottom 10": Light brown, fine to medium SAND, moist, loose	0.0		
+8 +	1638798	83		Light brown, fine SAND, trace(+) medium Sand, wet, loose	0.0		
1	1638799	83		Light brown, medium to fine SAND, trace(+) corase Sand, wet, loose	0.0		
+12	1638800	83	1	Light brown, medium to fine SAND, trace(+) coarse Sand, wet, loose	0.0		
†	1638801	83		As Above	0.0		
+16				Bottom of Boring at 16'			
20							
24							
Comment	s:						

LEA Com	Tank Traile m No: 68 Pratt & Whit	V7068	e Area Add	07/17/97 Boring	
Location: Drilling Control Drilling M Sampling	East Hart ontractor: (ethod: G Method: iter Observa IR A	ford, CT LEA leoprobe Macro (tions: At:	Core Hours Hours	Logged By: D. Brisson Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1638802	96		Top 12": Light brown to red brown, coarse to fine SAND, trace Gravel, dry, loose; Middle 6": Brown, fine to very fine SAND, trace(-) Silt, trace organics, dry, moderately	0.0
† †	1638803	96		dense; Bottom 5": Strong brown to black, fine to very fine SAND, trace Silt, trace organic matter, trace Gravel, moist, moderately dense	0.0
+4	1638804	83		Top 8": As Above, bottom 5"; Bottom 15": Light brown, fine SAND, trace medium Sand, moist, loose Top 20": As Above	0.0
†	1638805	83		Top 14": As Above; Bottom 6": Brown, fine to medium SAND, trace coarse Sand, moist, loose	0.0
+8	1638806	71		As Above, Bottom 6*, wet	0.0
<u> </u>	1638807	71		Top 10": As Above; Bottom 7": Brown, coarse to fine SAND, wet, loose	0.0
+12	1638808	79		Brown, medium to fine SAND, trace(+) coarse Sand, wet, loose	0.0
† †	1638809	79		As Above	
16				Bottom of Boring at 16'	
Comment	s:				

LEA Com	n No: 68' ratt & Whit	V7068 ney	e Area Add	Start Date 07/17/97 Boring ID End Date 07/17/97 SA-SB-15	ll l
Drilling Co Drilling Me Sampling N	ontractor: ethod: G Method: ter Observat	LEA eoprobe Macro (Core Hours	Logged By: D. Brisson Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Northing:	
Depth:	A	kt:	Hours	Rasting:	
Elevation/ Depth	Sam Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1638810	96		Top 12": Light brown to red brown, coarse to fine SAND, trace Gravel, dry, loose; Bottom 10": Brown, fine to medium SAND, trace Silt, trace organic matter, moist, moderaely	0.0
	1638811	96		dense Top 18": As Above; Bottom 6": Light brown, fine SAND, trace medium Sand, moist, loose	0.0
+4	1638812	62		As Above	0.0
<u> </u>	1638813	62		As Above	0.0
+8	1638814	75		As Above	0.0
†	1638815	75		Brown, fine to medium SAND, trace(-) coarse Sand, wet, loose	0.0
+12 +	1638816	83		As Above	0.0
† †	1638817	83		As Above	0.0
+18 - - - -				Bottom of Boring at 16'	
20					
24					
Comments	: :	<u>i</u>			

Tank Trailer Storage Area Add. Inv. Project: **Start Date** Boring ID LEA Comm No: 68V70 Client: Pratt & Whitney 07/18/97 End Date 68V7068 **SA-SB-158** Location: East Hartford, CT 07/18/97 Logged By:
Drilling Foreman:
Drill Rig: Geopr Drilling Contractor: Drilling Method: LEA D. Brisson Geoprobe Sampling Method: Macro Core Geoprobe 5400 Surface Elevation: Groundwater Observations: Depth: NR Hours Northing: At: Depth: At: Hours Easting:

1		vr:	Hours	Tasung:	
Elevation/ Depth	Sample Information			Sample Description	
	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1638830	96		Top 8": Red brown, coarse to fine SAND, trace Gravel, moist, loose; Bottom 14": Light brown, fine SAND, little medium Sand, trace coarse Sand, moist, loose	0.0
‡	1638831	96		Light brown, fine SAND, little medium Sand, trace coarse Sand, moist, loose	0.0
+4	1638832	83		As Above	0.0
† †	1638833 1638834	83		As Above	0.0
	1638835	75		As Above, wet	0.0
‡	1638836	75		As Above, Bottom 4"	0.0
† ₁₂	1638837	96		Top 6": As Above; Bottom 18": Light brown, coarse to medium SAND, little fine Sand, wet, loose	0.0
‡ †	1638838	96		As Above	
16				Bottom of Boring at 16'	
20					
+ + +					
+ 24					

LEA Com	n No: 68' ratt & White	V7068 [°] ney	e Area Add	Start Date 07/18/97 Boring ID End Date 07/18/97 SA-SB-15	ll l
Drilling Co Drilling Me Sampling N	ethod: G Method: ter Observat R A	LEA eoprobe Macro		Logged By: M. Budnick Drilling Foreman: D. Brisson Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
Deptu.		ple Informa		Sample Description	
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1638839	92		Top 10": Red brown, coarse to fine SAND, trace Gravel, moist, loose; Bottom 10": Light brown, fine SAND, little medium Sand, trace coarse Sand, moist, loose	
	1638840	92		Top 20": As Above; Bottom 4": Light brown, fine to medium SAND, trace coarse Sand, moist, loose	
+4	1638841	75		As Above	
	1638842	75		As Above	
	1638843	83		As Above, wet	
	1638844	83		Top 20": As Above; Bottom 4": Brown, medium SAND, little coarse Sand, trace fine Sand, wet, loose	
+12	1638845	96		As Above Bottom 4"	
	1638846	96		As Above	
16				Bottom of Boring at 16'	
20					
24					
Comments	:	L			

LEA Com	Tank Traile n No: 68 ratt & Whit East Hart	V7068 ney	Area Add.	Start Date 07/18/97 Boring End Date 07/18/97 SA-SB	
Drilling Co Drilling Me Sampling I	ontractor: ethod: G Method: ter Observa R	LEA ieoprobe Macro C	ore Hours Hours	Logged By: M. Budnick Drilling Foreman: D. Brisse Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	on
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ļ°	1638847	96		Top 6": Red brown, coarse to fine SAND, trace Gravel, moist, loose; Bottom 16": Light brown, fine SAND, little medium Sand, trace coarse Sand, moist, loose	
† †	1638848	96		As Above, Bottom 16"	
+4	1638849	62		As Above	
† †	1638850	62		As Above	
+8 1	1638851	83		As Above, wet	
<u> </u>	1638852	83		As Above	
12	1638853	96		As Above	
†	1638854	96		As Above	
16				Bottom of Boring at 16'	
20					
†					
+ 24 + +					
Comments	::			.	

GEOLOGIC BORING LOG

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Boring ID

Tank Trailer Storage Area Add. Inv. Project:

LEA Commission Number: 68V7068.

Pratt & Whitney East Hartford-JBK Client:

Location: P&W East Hartford

Drilling Contractor: LEA

Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observation

Depth: 8.0 at: 11:20

at:

Hours &

Depth:

Start Date

7/21/1997

End Date

SA-SB-161

7/21/1997

Logged by: Joe Trzaski

Drilling Foreman:

Drill Rig: Geoprobe 5400

Surface Elevation:

0.00

Northing:

143,915.5

Easting:

181,468.5

Depth	Sample Information			Soil Description	
	Sample No.	Recovery	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID
0	1638859	88		top 1" black bituminous asphalt next 2" reddish brown coarse GRAVEL, some fine SAND, trace coarse SAND, dry, loose remainder brownish yellow to dark brown fine SAND, little SILT, dry to slightly moist, loose	0.0
2	1638860	88		brownish yellow to dark brown fine SAND, little SILT, dry to slightly moist, loose	0.0
4	1638861	58		top 6" brownish yellow to dark brown fine SAND, little SILT, moist, loose middle 10" pale brown fine (+) to very fine SAND, trace SILT, moist, loose	0.0
6	1638862	58		bottom 12" yellowish brown fine SAND, trace medium SAND, trace SILT, moist, loose occasional asphalt pieces on outside of whole sample tube	0.0
8 ,	1638863	75		dark yellowsih brown fine SAND, little SILT, little medium SAND, trace organic matter, wet, moderately dense. 1" layer of black SILT at 12" in sample	0.0
10	1638865	75		dark yellowsih brown fine SAND, little SILT, little medium SAND, trace organic matter, wet, moderately dense. 1" layer of black SILT at 28" in sample	0.0
12	1638866	83		top 24" greyish brown fine to medium SAND, trace coarse SAND, wet, loose	0.0
14	1638867	83		top 24" greyish brown fine to medium SAND, trace coarse SAND, wet, loose bottom 16" light olive brown fine to very fine SAND, wet, loose	0.0

Comments:



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SA-SB-161

GEOLOGIC BORING LOG

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Project: Tank Trailer Storage Area Add. Inv.

LEA Commission Number: 68V7068.

Client: Pratt & Whitney East Hartford-JBK

Location: P&W East Hartford

Drilling Contractor: LEA

Drilling Method:

Geoprobe

Sampling Method:

Macro Core

Groundwater Observation

Depth: 8.0

Depth:

at: 13:20

2

at: Hours &

Start Date

Boring ID

7/21/1997

End Date

SA-SB-162

7/21/1997

Logged by: Joe Trzaski

Drilling Foreman:

Drill Rig: Geoprobe 5400

Surface Elevation:

0.00

Northing:

143,884.2

Easting:

181,467.2

Depth	Sample Information			Soil Description	
	Sample No.	Recovery	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm
0	1638868	83		top 1" black bituminous asphalt middle 4" red fine to coarse GRAVEL with fine to medium SAND, trace coarse SAND, dry, loose bottom 35" dark yellowish brown fine SAND, little SILT, trace medium SAND, dry to slightly moist, loose	0.0
2	1638869	83		dark yellowish brown fine SAND, little SILT, trace medium SAND, dry to slightly moist, loose	1.0
4	1638870	100		yellowish brown fine to very fine SAND, trace SILT, trace medium SAND, moist, loose	3.8
6	1638871	100		top 8" yellowish brown fine to very fine SAND, trace SILT, trace medium SAND, moist, loose Asphalt layer at 8" bottom 16" dark brown fine SAND, trace SILT, trace medium SAND, moist, loose	2.8
8 ,	1638872	50		dark yellowish brown fine SAND, little SILT, little medium SAND, trace organic matter, wet, loose	1.8
10	1638873	50		top 6" dark yellowish brown fine SAND, little SILT, little medium SAND, trace organic matter, wet, loose bottom 6" brownish yellow medium to vine SAND, wet, loose	2.6
12	1638874	75		greyish brown medium to fine SAND, trace coarse SAND, grading to	1.6
14 	1638875	75		light olive brown fine SAND, wet, loose	1.1

Comments:



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SA-SB-162

Start Date Project: SA Fire Training Area B **Boring ID** LEA Comm No: 07/02/97 68V7081 Client: Pratt & Whitney **End Date SA-SB-128** Location: East Hartford, CT 07/02/97 Logged By: J. Trzaski **Drilling Contractor:** LEA Drilling Method: Drilling Foreman: D. Brisson Geoprobe MC Drill Rig: GP-5400 Sampling Method: Macro Core Surface Elevation: Groundwater Observations: Depth: Northing: At: Easting: Depth: At: Hou Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 0.7 1637112 88 Top 3": Organic debris; Middle 10": Brown, SILT and fine SAND, trace organic matter, trace medium Sand, dry, loose; Bottom 8": Brownish yellow, fine SAND, some Silt, trace medium Sand, slightly moist, moderately dense 1637113 88 0.2 Top 10": Same as last 8": Bottom 12": Light yellowish brown, SAND, grading to fine to medium SAND, slightly moist, loose 1637114 62 1.2 Light yellowish brown, fine to medium SAND, moist to wet, loose, wet at 20" 0.0 1637115 62 1637116 0.1 Light olive brown, fine SAND, wet, loose 0.3 1637117 88 Yellowish brown, fine to medium SAND, iron staining throughout, wet, loose 12 1637118 67 1.1 Light olive brown, medium to fine SAND, trace coarse Sand, wet, loose Printed On: 1/22/1998 0.8 1637119 67 Light olive brown, fine to medium SAND, wet, loose 16 Bottom of Boring at 16' 20 Boring Comments:

Project: SA Fire Training Area B **Start Date** Boring ID 68V7081 LEA Comm No: 07/02/97 Client: Pratt & Whitney **End Date SA-SB-129** Location: East Hartford, CT 07/02/97 **Drilling Contractor: LEA** J. Trzaski Logged By: Drilling Method: **Drilling Foreman:** Geoprobe MC D. Brisson Sampling Method: Macro Core Drill Rig: **GP-5400 Groundwater Observations:** Surface Elevation: Depth: Hours Northing: At: Depth: At: Hours Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness Top 2": Organic debris; Next 12": Brown, SILT and fine 1637120 88 0.0 SAND, trace organic matter, trace medium Sand, dry, moderately dense; Bottom 7": Brownish yellow, fine SAND, some Silt, trace medium Sand, slightly moist, moderately 1637121 88 0.0 dense Top 7": Same as last 7"; Bottom 14": Light yellowish brown, fine to very fine SAND, grading to fine to medium 1637122 67 0.5 SAND, slightly moist, loose Light yellowish brown, fine to medium SAND, moist to wet, loose, wet at 20" 67 1637123 0.4 8 1637124 83 0.7 As Above 1637125 83 0.2 Yellowish brown, medium to fine SAND, trace coarse Sand, wet, loose 12 1637126 62 1.2 Yellowish brown, fine to medium SAND, trace Silt, wet, loose, iron staining throughout 1637127 0.9 Light olive brown, fine(+) to medium SAND, wet, loose 16 Bottom of Boring 16' 20 Comments:



Printed

On: 1/22/1998

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Project: South Airport: Former Storage Area

LEA Commission Number: 68V7102.

Client: Pratt & Whitney East Hartford-JBK

Location: P&W East Hartford

Drilling Contractor: Loureiro Engineering Asso

Drilling Method: Direct Push Sampling Method: Macro Core

Groundwater Observation

Depth: 7.0

at: 10:45

Depth:

at: H

Hours &

Start Date

Boring ID

2/6/1998

End Date 2/6/1998

SA-SB-163

Logged by: Boris Tomicic

Drilling Foreman: Jeff Klapheke

Drill Rig: Geoprobe 5400

Surface Elevation:

Northing:

0.00

Easting: 0.0

	Informat		Soil Description	
Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FI
1654011	71		0" - 2" bituminous 4" reddish brown COBBLE and PEBBLE, trace (+) medium Sand, dry, loose bottom 11" brown fine SAND, trace (+) medium Sand, dry, loose	0.0
1654012	71		brown medium SAND, some (+) fine Sand, dry, loose, poorly sorted	0.0
1654013	75		brown fine SAND, trace (+) medium Sand, dry, loose, 1" pebble lense at 6"	0.0
1654014	75		brown fine SAND, trace (+) medium Sand, moist, loose, poorly sorted T wet	0.0
1654015	92		0" - 3" reddish brown medium SAND, some (+) fine Sand, wet, moderately dense 3" - 22" brown fine SAND and medium SAND, wet, loose	0.0
1654016	92		brown fine SAND and medium SAND, wet, loose	0.0
1654017	58		greyish brown fine SAND, some (+) medium Sand, wet, loose, mica	0.3
1654018	58		greyish brown fine SAND, some (+) medium Sand, wet, loose, mica	0.0
	1654012 1654013 1654014 1654015 1654016	1654011 71 1654012 71 1654013 75 1654014 75 1654015 92 1654016 92	1654011 71 1654012 71 1654013 75 1654014 75 1654015 92 1654016 92	1654011 71 0"-2" bituminous 4" reddish brown COBBLE and PEBBLE, trace (+) medium Sand, dry, loose bottom 11" brown fine SAND, trace (+) medium Sand, dry, loose, 1654012 71 brown fine SAND, some (+) fine Sand, dry, loose, poorly sorted 1654013 75 brown fine SAND, trace (+) medium Sand, dry, loose, 1" pebble lense at 6" 1654014 75 brown fine SAND, trace (+) medium Sand, moist, loose, poorly sorted 7 wet 1654015 92 0"-3" reddish brown medium SAND, some (+) fine Sand, wet, moderately dense 3"-22" brown fine SAND and medium SAND, wet, loose 1654016 92 brown fine SAND and medium SAND, wet, loose 1654017 58 greyish brown fine SAND, some (+) medium Sand, wet, loose, mica



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SA-SB-163

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Start Date

Boring ID

LEA Commission Number: 68V7102.

Pratt & Whitney East Hartford-JBK

South Airport: Former Storage Area

Location: P&W East Hartford

Loureiro Engineering Asso

Drilling Method: Direct Push Sampling Method: Macro Core

Groundwater Observation

Drilling Contractor:

Depth: 7.0

Project:

Client:

at: 12:20

Depth: at: Hours &

2/6/1998 End Date

SA-SB-164

2/6/1998

Logged by: Boris Tomicic

Drilling Foreman: Jeff Klapheke

Drill Rig: Geoprobe 5400

Surface Elevation: 0.00

Northing: 0.0 Easting: 0.0

Depth	Sample Information			Soil Description		
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppen	
0	1654019	92		0" - 4" red COBBLES, trace (-) fine and medium Sand, moist, moderately dense, fibric organic matter 4" - 18" dark brown SILT, some (-) fine Sand, dry, moderately dense 18" - 22" brown fine SAND, trace (-) medium Sand, dry, loose, poorly sorted	0.0	
2	1654020	92		brown fine SAND, trace (-) medium Sand, dry, loose, poorly sorted	0.0	
4	1654022	83		0" - 14" brown fine SAND, trace (-) medium Sand, trace (+) Silt, dry, loose, poorly sorted 14" - 20" greyish brown medium SAND, trace (+) fine Sand, moist, loose, well sorted	0.0	
6	1654023	83		greyish brown medium SAND, trace (+) fine Sand, moist, loose, well sorted 7 wet	0.0	
8	1654024	67		greyish brown medium SAND, trace (+) fine Sand, wet, loose, well sorted	0.0	
10	1654025	67		greyish brown medium SAND, trace (+) fine Sand, wet, loose, well sorted	0.0	
12	1654026			grey medium SAND, some (+) fine Sand, trace (+) Pebbles, wet, loose, poorly sorted	0.0	
14	1654027			grey medium SAND, some (+) fine Sand, trace (+) Pebbles, wet, loose, poorly sorted, black lense at 14'	0.0	
16 Comment	<u> </u>	<u> </u>	L			

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Project: South Airport: Former Storage Area

LEA Commission Number: 68V7102.

Pratt & Whitney East Hartford-JBK

Location: P&W East Hartford

Drilling Contractor: LEA **Drilling Method:**

Geoprobe

Sampling Method:

Macro Core

Groundwater Observation

Depth: 7.0

Depth:

at: 13:35

at: Hours & Start Date 2/6/1998

Boring ID

End Date

SA-SB-165

2/6/1998

Logged by: Boris Tomicic

Drilling Foreman:

Drill Rig: Geoprobe 5400

Surface Elevation:

0.00

Northing:

0.0

Easting: 0.0

Depth	Sample	: Informat	tion	Soil Description		
	Sample No.	Recovery	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm	
0	1654028	83		0" - 2" brown medium SAND, some (+) Cobbles and Pebbles, dry, dense, fibric matter 4" bituminous 6" - 20" brown fine SAND, trace (-) medium Sand, dry, loose, well sorted, Silt lense at 14"	0.0	
2	1654029	83		brown fine SAND, some (-) medium Sand, dry, loose, poorly sorted	0.0	
4	1654030	79 .		0" - 3" brown fine SAND, some (-) medium Sand, dry, loose, poorly sorted, black lense at bottom 3" - 19" greyish brown fine SAND, trace (-) medium Sand, moist, loose, poorly sorted	0.0	
6	1654031	79		greyish brown medium SAND, some (-) fine Sand, moist, loose, poorly sorted $\mathcal T$ wet	0.0	
8	1654032	69		greyish brown medium SAND, some (-) fine Sand, wet, loose, poorly sorted	0.0	
10	1654033	69		greyish brown medium SAND, some (-) fine Sand, wet, loose, poorly sorted	0.0	
12	1654034	63		greyish brown medium SAND with Pebbles, some (-) fine Sand, wet, loose, poorly sorted	0.0	
14	1654035	63		greyish brown medium SAND, some (-) fine Sand, wet, loose, poorly sorted, dark lense at 15'	0.0	

Comments:



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Start Date 2/6/1998

End Date

2/6/1998

Boring ID

SA-SB-166

0.0

LEA Commission Number: 68V7102.

Client:

Project:

Pratt & Whitney East Hartford-JBK

South Airport: Former Storage Area

Location: P&W East Hartford

Loureiro Engineering **Drilling Contractor:**

Drilling Method:

Sampling Method: **Groundwater Observation**

Macro Core

Depth:

7.0

at: 14:45

Depth: at:

Direct Push

Hours &

Logged by: Boris Tomicic

Drilling Foreman: Jeff Klapheke

Drill Rig: Geoprobe 5400

Surface Elevation:

0.00 Northing:

Easting: 0.0

Depth	Sample Information			Soil Description		
<u>-</u>	Sample No.	Recovery	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm	
0	1654036	85		0" - 4" dark brown fine SAND, some (+) COBBLES and PEBBLES, moist, dense, fibric matter 4" reddish brown fine SAND, some (-) Silt, dry, moderately dense bottom [sic] brown fine SAND, some (-) medium Sand, dry, loose	0.0	
2	1654037	85		brown fine SAND, some (-) medium Sand, dry, loose	0.0	
4	1654038	69		brown fine SAND, some (-) Silt, some (-) medium Sand, dry, loose	0.0	
6 ,	1654039	69		greyish brown medium SAND, some (+) fine Sand, moist, loose, poorly sorted 7 wet	0.0	
8	1654040	79		greyish brown medium SAND, some (+) fine Sand, wet, loose, poorly sorted	0.0	
10	1654041	79		greyish brown medium SAND, some (+) fine Sand, wet, loose, poorly sorted, dark lense at 11.5'	0.0	
12	1654042	65		greyish brown medium SAND, trace (+) fine Sand, some (-) Pebbles, wet, loose, poorly sorted	0.0	
14	1654043	65		greyish brown medium SAND, trace (+) fine Sand, some (-) Pebbles, wet, loose, poorly sorted	0.0	

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Project: South Airport: Former Storage Area

LEA Commission Number: 68V7102.

Pratt & Whitney East Hartford-JBK

Location: P&W East Hartford

Loureiro Engineering A

Drilling Method: Direct Push Sampling Method: Macro Core

Groundwater Observation

Depth: 4.8

Client:

at: 11:05

Depth:

Drilling Contractor:

at:

Hours &

Start Date

2/6/1998

End Date 2/6/1998

Boring ID

SA-SB-167

Logged by: Boris Tomicic

Drilling Foreman: Jeff Klapheke

Drill Rig: Geoprobe 5400

Surface Elevation:

Northing:

0.00 0.0

Easting: 0.0

Depth	Sample Information			Soil Description		
	Semple No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FII ppm	
0	1654048	81		top 6" topsoil 6" - 20" dark red brown fine to coarse SAND, trace fine Gravel, slightly moist, loose	0.0	
2	1654049	81		dark red brown fine to coarse SAND, trace fine Gravel, slightly moist, loose	0.0	
4.0	1654050	83		0" - 8" red brown fine SAND, moist, loose 8" - 20" dark brown SAND, some fine Gravel, wet, loose 5.5' wet	0.0	
6	1654051	83	•	dark brown SAND, some fine Gravel, wet, loose	0.0	
8	1654052	96		0" - 6" brown coarse SAND, some fine Gravel, wet, loose 6" - 23" brown fine SAND, some fine Gravel, wet, loose	0.0	
10	1654053	96		brown fine SAND, some fine Gravel, wet, loose	0.0	
12	1654054	67		brown fine SAND, some fine Gravel, wet, loose	0.0	
14	1654055	67		0" - 4" brown fine SAND, some fine Gravel, wet, loose 4" - 16" red brown coarse SAND, some fine Gravel, wet, loose	0.0	

Comments:



LEA Commission Number: 68V7102.

Location: P&W East Hartford

Groundwater Observation

Drilling Contractor: Drilling Method:

Sampling Method:

Project:

Client:

Start Date

of

1

Boring ID

2/6/1998

End Date

SA-SB-168

2/6/1998

Logged by: Boris Tomicic

Drilling Foreman: Jeff Klapheke

Drill Rig: Geoprobe 5400

0.00

Page 1

Surface Elevation: Northing:

0.0

Depth:	4.7	at:	12:11		
Depth:		at:		Hours	

South Airport: Former Storage Area

Pratt & Whitney East Hartford-JBK

Direct Push

Macro Core

Loureiro Engineering

&

Easting:

0.0

Depth	Sample	Informat	ion	Soil Description	
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID
0	1654056	. 88		0" - 4" topsoil 4" - 21" yellow brown SAND, some fine Gravel, dry, loose, coarsening downward rock at 6", asphalt at 12"	0.0
2	1654057	88		yellow brown SAND, some fine Gravel, dry, loose	0.0
4	1654058	96		0" - 8" yellow brown SAND, some fine Gravel, slightly moist, loose 8" - 23" brown coarse SAND, some fine Gravel, some fine Sand, moist to wet, loose	0.0
6	1654059	96		brown coarse SAND, some fine Gravel, some fine Sand, very moist to wet, loose	0.0
8	1654060	92		brown coarse SAND, some fine Gravel, some fine Sand, wet, loose	3.5
10 	1654061	92		brown coarse SAND, some fine Gravel, some fine Sand, wet, loose	0.0

Comments:



Page 1

of

South Airport: Former Storage Area Project:

LEA Commission Number: 68V7102.

Pratt & Whitney East Hartford-JBK

Location: P&W East Hartford

Loureiro Engineering

Direct Push **Drilling Method:** Macro Core Sampling Method:

Groundwater Observation

Depth: 4.7

Drilling Contractor:

Client:

at: 13:42

at:

Depth:

Hours &

Start Date

Boring ID

2/6/1998

End Date

Easting:

SA-SB-169

0.0

2/6/1998

Logged by: Boris Tomicic

Drilling Foreman: Jeff Klapheke

Drill Rig: Geoprobe 5400

Surface Elevation:

0.00 Northing: 0.0

Depth	Sample Information			Soil Description		
	Sample No.	Recovery	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm	
0	1654062	92		0" - 4" brown to black fine SAND, organic matter 4" - 8" red brown fine SAND, little coarse Gravel, dry, loose 8" - 22" light brown fine SAND, little fine Gravel, dry, loose	0.1	
2	1654063	92		light brown fine SAND, little fine Gravel, dry, loose	0.0	
4	1654064	88		0" - 6" light brown fine SAND, little fine Gravel, dry, loose 6" - 7" red brown fine SAND, little coarse Gravel, dry, dense 7" - 21" grey brown coarse SAND, little fine Gravel, slightly moist to wet, loose	0.0	
6	1654065	88		grey brown coarse SAND, little fine Gravel, slightly moist to wet, loose	0.0	
8	1654066	88		grey brown coarse SAND, little fine Gravel, slightly moist to wet, loose	0.0	
10	1654067	88		0" - 6" grey brown coarse SAND, little fine Gravel, slightly moist to wet, loose 6" - 21" grey to dark brown coarse SAND, some fine Gravel, wet, loose	0.0	
12	1654068	88		grey to dark brown coarse SAND, some fine Gravel, wet, loose	0.0	
14	1654069	88		grey to dark brown coarse SAND, some fine Gravel, wet, loose	3.5	

Comments:

LOUREIRO ENGINEERING ASSOCIATES, PC

SA-SB-169

Page 1

of

1

South Airport: Former Storage Area Project:

LEA Commission Number: 68V7102.

Pratt & Whitney East Hartford-JBK Client:

Location: P&W East Hartford

Loureiro Engineering Associates

Drilling Method: Direct Push Sampling Method:

Macro Core

Groundwater Observation

Drilling Contractor:

Depth: 7.0 Depth:

at: 14:45

Hours & at:

Start Date

Boring ID

2/6/1998

End Date

SA-SB-170

2/6/1998

Logged by: Boris Tomicic

Drilling Foreman: Jeff Klapheke

Drill Rig: Geoprobe 5400

Surface Elevation:

Northing:

0.00 0.0 0.0

Easting:

Depth	Sample	Informat	ion	Soil Description		
	Sample No.	Recovery %	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity Angularity, Sedimentary Structure, Density, Cohesiveness, Other	PID/FID ppm	
0	1654070	88		0" - 4" reddish brown fine SAND, some (-) Pebbles, moist, dense (frost) 4" - 21" brown fine SAND, trace (+) medium Sand, dry, loose, poorly sorted	0.2	
2	1654071	88		brown fine SAND, trace (+) medium Sand, dry, loose, poorly sorted	2.2	
4	1654073	75		0" - 12" brown fine SAND, trace (-) medium Sand, dry, loose, poorly sorted 12" - 15" dark reddish brown medium SAND, some (-) fine Sand, trace (-) Pebbles, moist, loose 15" - 18" grey fine SAND, trace (-) medium Sand, moist, moderately dense	2.8	
6	1654074	75		reddish brown fine SAND, some (+) medium Sand, moist, loose, poorly sorted 7 wet	0.0	
8	1654075	79		reddish brown fine SAND, some (+) medium Sand, moist, loose, poorly sorted	4.3	
10	1654076	79		reddish brown fine SAND, some (+) medium Sand, moist, loose, poorly sorted	3.9	
12	1654077	90		brown meidum SAND, some (-) fine Sand, wet, loose, poorty sorted	0.0	
14	1654078	90		brown meidum SAND, some (-) fine Sand, wet, loose, poorly sorted	3.5	
16 Comment	S:					

	Tage 1 of 1
Project: VPSA LEA Comm No: 68TR517	Start Date Boring ID
Client: Pratt & Whitney Location: East Hartford, CT	End Date 7/23/96 SK-SB-22
Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro core Groundwater Observations: Depth: NM At: Hours Depth: At: Hours	Logged By: M. Budnick Drilling Foreman: J. Klapheke Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:
Sample Information	Sample Description

Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity.	
Sample No.	Recovery (火)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity.	
·	<u> </u>	l	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
1016326	83		Reddish brown, fine to medium SAND, little fine Gravel,	2.0
1016327	83		As above	2.0
1016328	83		As above	5.6
1016329	83		As above	40.0
			Bottom of boring at 4'	
		1016328 83	1016328 83	1016327 83 Slightly moist to wet, loose As above 1016328 83 As above 1016329 83 As above

ÆÀ Comi lient: P ocation:	ratt & White East Harte Parte Contractor:	TR517 ney ford, CT LEA leoprobe	W.	End Date 7/23/96 Logged By: M. Budnick	ing ID SB-23
ampling l	Method: ter Observat M A	Macro o	core Hours Hours	Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:)
epth	Sample No.	Recovery	Blaus /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
To	1016330	83		Reddish brown, fine to medium SAND, little fine Grave	1, 2.8
‡	1016331	83		slightly moist to wet, loose As above	1.0
<u> </u>	1016332	83	<u></u> -	4": As above; 8": Olive CLAY, wet	20.0
Ì	1016333	83			75.0
8				Bottom of boring 4'	
12					
16					
20					
omments	s: Boreho	le backf	illed with be	entonite chips upon completion.	

	· · · · · · · · · · · · · · · · · · ·		Tage 1 Of 1	
Project: VPSA LEA Comm No: 68TR517		Start Date 7/23/96	Boring ID)
Client: Pratt & Whitney Location: East Hartford, CT		End Date 7/23/96	SK-SB-24	1
Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro con Groundwater Observations: Depth: NM At: Depth: At:	Hours \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Logged By: M. Drilling Foreman: Drill Rig: Geop Surface Elevation: Northing: Easting:	robe 5400	
Sample Information	n	Sample Description		
Rievation/ Depth Sample Recovery Blows Color, Primary Grain Size, Secondary Grain Size, Supericity, Angularity				(

Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 1016334 88 Reddish brown, fine to medium SAND, little fine Gravel, slightly moist to wet, loose 1016336 88 As above 2.0	Depth:		At:	Hours	Fasting:	
10		San	nple Informa	ition	Sample Description	
1016335 88 As above 2.0 1016336 88 As above 2.8 1016337 88 As above 2.8 Bottom of boring at 4'	Klevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Moisture, Sorting, Sphericity, Angularity,	(ppm)
1016336 88 As above 2.0 1016337 88 As above 2.8 Bottom of boring at 4'	To		88			0.4
1016337 88 As above 2.8 Bottom of boring at 4'	Ŧ	1016335	88			9.0
Bottom of boring at 4'	Ŧ	1016336	88		As above	2.0
	‡.	1016337	88		As above	2.8
20	+				Bottom of boring at 4'	
-24	16					
Comments: Borehole backfilled with bentonite chips upon completion.	† † † † †					
Comments: Borehole backfilled with bentonite chips upon completion.						
	Commen	its: Boreho	ole backf	illed with b	entonite chips upon completion.	

Location: Drilling Control Drilling M Sampling	ontractor: (ethod: G Method: ter Observa IM A	ford, CT LEA leoprobe Macro d tions: At:	core Hours Hours	End Date 7/23/96 Logged By: M. Budnick Drilling Foreman: J. Klapheke Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
Devation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
70	1016338	92		Reddish brown, fine to medium SAND, little fine Gravel,	4.8
‡	1016339	92		slightly moist to wet, loose As above	300.0
ţ	1016340	92		As above	5.0
‡	1016341	92		As above	45.0
12				Bottom of boring at 4'	
24 Comment	s: Boreho	ole backt	illed with b	entonite chips upon completion.	

Project: VPSA LEA Comm No: 68TR517	<u> </u>		Start Date 7/23/96	Boring ID
Client: Pratt & Whitney Location: East Hartford, CT			End Date 7/23/96	SK-SB-26
Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro core Groundwater Observations: Depth: NM At: Depth: At:	Hours Hours	<u>₩</u>	Logged By: M. Drilling Foreman: Drill Rig: Geop Surface Elevation: Northing: Easting:	J. Klapheke robe 5400
Sample Information			Sample Description	

Deptn:		At:	nours	₹ rasung:	
	San	pie Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1016342	88		Reddish brown, fine to medium SAND, little fine Gravel,	8.0
‡	1016343	88		slightly moist, wet, loose As above	14.0
‡	1016344	88		As above	11.0
‡ 1	1016345	88		4.5": As above; 6": Olive, CLAY, wet	600.0
+4		1		Bottom of boring 4'	
‡ !					
<u> </u>		1 1	ļ		
‡		1			
+8					
‡ !					
1					
<u>†</u>			:		
12		1			
Ŧ !	}				
†		1 1	i		
Ŧ					
+ 16					
‡					-
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‡	ļ	1 1	İ		
+ 20		1 1	i		
‡	Ì				
‡	İ	}			l
‡		1 1			1
+ 24					-
1 27					
†					
Comments	: Boreho	le backfi	lled with be	entonite chips upon completion.	



GEOLOGIC BORING LOG		,	Page 1 of 1
Project: VPSA LEA Comm No: 68TR517		Start Date 7/23/96	Boring ID
Client: Pratt & Whitney Location: East Hartford, CT		End Date 7/23/96	SK-SB-27
Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro core Groundwater Observations: Depth: NM At:	Hours ₹	Logged By: M Drilling Forema Drill Rig: Geo Surface Elevatio Northing:	oprobe 5400

VI A	\t:	Hours Hours	Surface Elevation: Northing: Easting:	
Sam	pie Informati	ion	Sample Description	
Sample No.	Recovery (X)	Blows '6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
1016346	79		Reddish brown, fine to medium SAND, little fine Gravel,	2.3
1016347	79		<u> </u>	26.0
1016348	79		As above	12.0
1016349	79		As above	34.0
			Bottom of boring 4'	
	1			
	Sample No. 1016346 1016347 1016348	At:	At: Hours At: Hours Sample information Sample Recovery Blows /6* 1016346 79 1016347 79 1016348 79	At: Hours Hours Easting: Sample Information Sample Peccription Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 1016346 79 Reddish brown, fine to medium SAND, little fine Gravel, little Silt, moist to wet, loose, strong petroleum odor As above 1016349 79 As above

68TR517

LEA

Project: VPSA

LEA Comm No:

Drilling Contractor:

Client: Pratt & Whitney

		Page 1 of 1		
	Start Date 7/24/96	Boring ID		
M.	End Date	SK SB 20		

SK-SB-28

Location: East Hartford, CT 7/24/96 Logged By: L. Bianchi
Drilling Foreman: J. Klapheke
Drill Rig: Geoprobe 5400 Geoprobe Macro core

Drilling Method: Sampling Method: Surface Elevation: Groundwater Observations: At: Depth: NM Hours Northing: Hours Easting: Depth:

Depth:		At:	Hours	₹ Kasting:	
	San	nple Informat	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T°	1016351	100		Reddish brown, fine to medium SAND, little fine Gravel, trace Silt, slightly moist, loose	40.0
Ŧ	1016352	100		As above, moist	150.0
. -	1016353	100		As above	61.0
\pm	1016354	100		As above, wet	41.0
T*				Bottom of boring at 4.0'	
1					
‡			!		
+ 8					
1		1 1			
‡	İ				
†					
+12					
†					
+					
-					
<u> </u>					
1					
<u> </u>					
1 ‡					
+20					
+24					
 		1			
Comments	: Boreho	le backfi	lled with be	entonite chips upon completion.	

Printed On: 1/23/1998

				<u> </u>		rage 1 of 1	
	/PSA				Start Date	Boring II	n
EA Comm		TR517	are i mark	Same of the same o	7/24/96	Doing I	
	att & Whit	ney	Contract of the second	W	End Date	SK-SB-2	9
ocation:	East Harti		The second		7/24/96		
rilling Corrilling Me ampling Me ampling Me roundwat	thod: G Ieth od: er Observat			ÿ	Drilling Forem Drill Rig: Ge Surface Elevati	oprobe 5400	•
Depth: NA Depth:		At: At:	Hours Hours	₽	Northing: Easting:		
реріп:							
}-	Sam	pie informati	ion		Sample Description	<u> </u>	
Clevation/ Depth	Sample No.	Recovery (%)	Biows /6"	Mois	imary Grain Size, Secondary ture, Sorting, Sphericity, An ntary Structures, Density, Co	gularity,	(ppm)
10	1016355 1016356	100			rown, fine to coarse SAND	, little fine Gravel,	125 125
‡ t	1016357	100		As above, moi	itly moist, loose	/	1000+
‡ †	1016358	100		As above	*************************************		810
‡ †	1016359	100		Reddish brown	, fine to medium SAND, w	et, slightly dense	290
† 4		++		Bottom of bori	ng at 4.0'		
1							
+ 1							}
Ŧ 1							
1 8							
‡		1					
1 1			!				
1							
-							
+12		1 1					
‡		1					
‡							
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+16							
Į		1					
‡ {							
‡							
+ 20							
<u> </u>		}					
Ŧ			i				
‡							1
‡							
+24							
<u>†</u>							
Comments	Paraba	le beaker	llad with h	entonite chips up	on completion		
Comments	: Boreho	ne dacktii	iea with be	antonite cuibs ab	oon completion.		

LEA Com	VPSA m No: 68 ratt & Whit East Hartl	TR517 ney ford CT		Start Date 7/24/96 Boring ID End Date 7/24/96 SK-SB-30	·
Drilling Co Drilling M Sampling	ontractor: cethod: G Method: ter Observa M A	LEA leoprobe Macro c	Hours Hours	Logged By: L. Bianchi Drilling Foreman: J. Klapheke Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
		ple Informat		Sample Description	
Elevation/ Depth	Sample No.	Recovery (次)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
I °	1016360	100		Dark reddish brown, fine to coarse SAND, little fine Gravel, trace Silt, moist, loose	33
lacksquare	1016361	100	_	Brown, fine(+) to medium SAND, some Silt, moist, slightly	19.0
 	1016362	100	:	\dense \frac{1}{As above}	6.5
	1016363	100		As above As above, wet	7.0
				Bottom of boring at 4.0'	
				•	
-24					

Comments:

Borehole backfilled with bentonite chips upon completion.

	<u> </u>	<u> </u>	
Project: VPSA		Start Date	Powing ID
LEA Comm No: 68TR517		7/24/96	Boring ID
Client: Pratt & Whitney		End Date	CV CD 21
Location: East Hartford, CT		7/24/96	SK-SB-31
Deilling Contractors IEA		Logged Pre	Pinnohi

Drilling Contractor: LEA

Drilling Method: Geoprobe
Sampling Method: Macro core
Groundwater Observations:
Depth: NM At: Hours
Depth: At: Hours
Depth: At: Hours
Depth: At: Hours
Depth: At: Hours
Depth: Hours
Depth: Hours
Depth: Hours
Depth: Hours
Depth: Hours
Depth: Hours
Depth: Hours
Depth: Hours
Depth: Hours
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Depth: Hours
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Depth: Hours
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Depth: Hours
Depth: Hours
Depth: L. Bianchi
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke
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Drilling Foreman: J. Klapheke
Drilling Foreman: J. Klapheke

<u> </u>	San	nple Informa	ation	Sample Description	
Devation/ Depth	Sample No.	Recovery (%)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1016364	100		Dark reddish brown, fine to coarse SAND, little fine Gravel,	2.0
‡ !	1016365	100		trace Silt, moist, loose Brown, fine to medium SAND, trace Silt, moist, slightly	1.4
†	1016366	100		dense	17.0
+	1016367	100		As above	12.0
‡4		4		As above, wet	
+				Bottom of boring at 4.0'	
8					
12					
16					
20					
24					
Comments				pentonite chips upon completion.	

Comments: Borehole backfilled with bentonite chips upon completion.



LEA Comr Client: Po Location: Drilling Co Drilling Me	ratt & White East Hartf Intractor: ethod: G	TR517 ney ford, CT LEA eoprobe		Start Date 7/24/96 End Date 7/24/96 SK-Si Logged By: L. Bianchi Drilling Foreman: J. Klaph	B-32
Sampling N	Method: ter Observat M A	Macro c tions: \t: \t:	Hours Hours	Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1016368	100		Yellowish brown, fine to coarse SAND, trace Silt, slightly	/ 3.2
‡ ¦	1016369	100		moist, loose Reddish brown, fine(+) to coarse SAND, little Silt, moist	2.4
†	1016370	100		\slightly dense	1.9
Ŧ	1016371	100		As above	1.7
‡4				Olive grey, SILT, trace fine Sand, wet, slightly dense Bottom of boring at 4.0'	
12					
<u> </u>					
Comments	s: Boreho	le backfii	lled with be	entonite chips upon completion.	

				, M	1001011
Project: LEA Comr	VPSA n No: 68TR517			Start Date 7/24/96	Boring ID
Client: Pr	ratt & Whitney East Hartford, CT			End Date 7/24/96	SK-SB-33
Drilling Co Drilling Me Sampling Me Groundwat Depth: N Depth:	ethod: Geoprobe Method: Macro co ter Observations:	Hours Hours	무	Logged By: L. Drilling Forema Drill Rig: Geo Surface Elevatio Northing: Easting:	probe 5400
	Sample Information	en l		Sample Description	
11	l l		Colon Del	Cusin Sine Cosendam (Consiss Stand

Depth: Depth:	NM	A A	At: At:	Hours Hours	Northing: Easting:			
		San	ple Informa	tion	Sample Description			
Elevation/ Depth	S	ample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
70	10	16372	100		Dark reddish brown, fine(+) to coarse SAND, little fine Gravel, trace Silt, moist, loose	0.3		
Ŧ	10	16373	100		Yellowish brown, SILT and fine SAND, moist, slightly dense	0.5		
Ţ	10	16374	100		As above	0.4		
‡	10	16375	100		As above, wet	0.5		
8					Bottom of boring at 4'			
12								
16								
20								
Comme		Boreho	ole backfi	illed with be	entonite chips upon completion.			



GEOLOG		 A RES		Page 1 of 1
	VPSA		Start Date	Boring ID
	n No: 68TR517 ratt & Whitney East Hartford, CT		7/24/96 End Date 7/24/96	SK-SB-34
Drilling Co Drilling Me Sampling N Groundwat Depth: NI Depth:	ethod: Geoprobe Method: Macro core ter Observations:	₩ ₩	Drilling Foren	eoprobe 5400
	Sample Information		Sample Description	
Elevation/		Color, Primar	y Grain Size, Secondar	v Grain Sizes.

Deptil:	A:	LL.	1101112	÷ casting.	
	Sam	ple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
- 0	1016376	100		Dark reddish brown, fine(+) to coarse SAND, with Silt, trace fine Gravel, slightly moist, loose	0.9
Ŧ	1016377	100		Yellowish brown, fine(+) to medium SAND, trace Silt,	0.5
Ŧ	1016378	100		∖moist, loose -∖As above	0.5
+ .	1016379	100		As above As above, wet	0.2
+4				Bottom of boring at 4.0'	
Ţ					
Ţ ,			i		
†_					
+8					
‡			Į.		
‡					
‡					
+12					
‡					
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+16		1			1
‡					
‡					
‡	!				
+20					
‡		1			
‡					
‡					
+ 24					
1					
Comments	: Boreho	le heckfil	lled with he	entonite chips upon completion.	
		OUCKIII	NOW THILLIP	ZIIVIIIV VIIDU UUUI UUIIDIUUUII	



EOLOGI	C DON				· • •		Page 1 of 1	
	PSA	TDE 17		The same of the sa	Start Date		Boring II)
ÆA Comm Ji en t: Pra	No: 00	TR517 tney	4		7/24/96 End Date			
	East Hart			The state of the s	7/24/96		SK-SB-3	
willing Con willing Met ampling Me woundwate epth:	hod: G ethod: r Observa	LEA Seoprobe Macro c tions: At:	ore Hours	₹	Logged By Drilling Fo Drill Rig: Surface El Northing:	oreman: Geopro levation:	J. Klapheke	
epth:		At:	Hours	<u>\$</u>	Easting:			
	San	nple Informat	ion		Sample Description			
evation/ epth	Sample No.	Recovery (%)	Blows /6"	Moist	nary Grain Size, Secon ire, Sorting, Sphericity tary Structures, Densit	, Angular	ity,	(ppm)
10	1016380	60			own, fine to coarse S	AND, trac	e Silt, trace	0.5
‡	1016381	60			htly moist, loose n, fine SAND, some S	ilt moiet	loose	0.2
† †	1016382	60			n, fine to medium SAI			1.4
+ +	1016383	60		slightly dense	·			0.9
+ 4 -				Yellowish brow Noose	n, fine to coarse SAN	D, trace \$	Silt, wet,	1
1			i	Bottom of borin	g at 4.0'			ľ
+ [
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† 1								
∓ 8								
† }]						1
+]]						
1								
†		1 1						
12		}		}				
†		1						
+								}
1		1					·	
+		1 1						İ
+16		1 1						
+		} }						
1		1 1						
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Į l		1 1						
+20								
720		1						}
t		1						
+								1
1								Ì
+ _								
+ 24								
† 1								
				L 			·	<u> </u>
Comments:	Boreho	ole backfi	iled with b	entonite chips upo	on completion.			
					<u></u>			



Project: VPSA LEA Comm No: 68TR517 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:**

LEA

Start Date 7/24/96 **End Date** 7/24/96

Boring ID

SK-SB-36

Logged By: L. Bianchi

epth: N Depth:	ter Observat M A A	uous: \t: \t:	Hours Hours	Surface Elevation: Northing: Easting:	
	Sam	ple Informati	on l	Sample Description	
levation/ lepth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1016384	100		Yellowish brown, fine SAND and SILT, moist, slightly dense	0.1
Ŧ	1016385	100		Brown, fine SAND, some Silt, moist, slightly dense	0.1
Ŧ	1016386	100		As above	0.2
‡	1016387	100		As above, wet	0.1
+12 +16				Bottom of boring at 4.0'	
20					
24					

3202031020111030			Page 1 of 1
Project: VPSA LEA Comm No: 68TR517		Start Date 7/24/96	Boring ID
Client: Pratt & Whitney Location: East Hartford, CT		End Date 7/24/96	SK-SB-37
Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro core Groundwater Observations: Depth: NM At: Depth: At:	Hours ₩ Hours ₩	Drilling Forem	eoprobe 5400
Sample Information		Sample Description	
Rievation/		Color, Primary Grain Size, Secondary	Grain Sizes.

оерш.		71.	Mom s	÷ Dasting.	
	San	nple Informa	tion	Sample Description	1
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
+0	1016388	1		Reddish brown, fine(+) to coarse SAND, little Silt,	0.2
‡	1016389	1		Slightly moist, loose Yellowish brown, fine to medium SAND, trace Silt, moist,	0.3
‡	1016392	1		\slightly dense	0.2
+	1016393	+		As above	0.5
I.4		\bot		As above, wet	
† † †				Bottom of boring at 4'	
+8					
† † † 12					
+ + + + + 16					
20					
24					
+					



Project: Linde Gas LEA Comm No: 68TR670 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEADrilling Method: Geopro Sampling Method: Macr Groundwater Observations: LEA Geoprobe Macro Core

Depth: NM

Hours

Start Date 8/27/96 **End Date** 8/27/96

Boring ID

SK-SB-38

L. Bianchi

Logged By: L. Bi Drilling Foreman: J. Sweeton

Drill Rig: Geoprobe 5400 Surface Elevation:

Northing:

Depth:	IVIVI		At:	Hours	Easting:			
	I	San	ple Informa	tion	Sample Description			
Clevation/ Depth		Sample No.	Recovery (%)	Blows ∕6″	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
0	1	017409	100		4": Concrete; 3": Subbase; 5": Dark reddish brown, fine to medium SAND and SILT, little coarse Sand, trace fine Gravel, moist, slightly dense; 11": Yellowish brown, fine to	0.1		
Ţ	1	017410	100		medium SAND, some Silt, moist, slightly dense As above	0.3		
+4	1	017411	100		Dark brown, fine SAND, with Silt, some medium Sand, little coarse, very moist, slightly dense	2.6		
†	1	017412	100		Dark red, fine to medium SAND, with Silt, some coarse Sand, little fine Gravel, trace coarse Gravel, moist, very dense	3.2		
+8	1	017413	100		As above	33.0		
<u> </u>	1	017414	100		Dark brown, fine to medium SAND, some Silt, little coarse Sand, wet, slightly dense	72.0		
+12	1	017415	100		Dark grey, fine to medium SAND, some Silt, little coarse Sand, wet, loose	31.0		
+	1	017416	100		As above	7.6		
+16	1	017417	100		Grey, medium to coarse SAND, some fine, trace Silt, trace(-) fine Gravel, wet, loose	1.0		
†	1	017418	100		Olive grey, varved CLAY, trace Silt, wet, stiff	0.0		
-20					Bottom of boring at 20.0'			
+ 24								
Commer	nts:	Boreho	le backfi	lled with be	entonite chips upon completion.	i		

Project: X-415 Area LEA Comm No: 68TR656 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Large Bore

Groundwater Observations: Depth: NM At:

Start Date 7/16/96 **End Date** 7/16/96

Boring ID

NK-SB-26

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

	C	aple Informati	^-	Sample Description	1
levation/ epth	Sample No.	Recovery (%)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	{ppm
10	1016016	90		12": Black, fine SAND, some medium Sand, little Silt, trace coarse Sand, moist, loose, organics/root fragments; 11": Light reddish brown, fine to medium SAND, little medium	1.8
<u> </u>	1016017 1016018	90		Sand, trace(+) Silt, trace(-) coarse Sand, moist, loose Light yellowish brown, fine to medium SAND, some Silt, trace(+) coarse Sand, wet (≈3.0), loose	5.4 5.9
+4	1016019	100		As above	5.7
I + +	1016020	100		Dark yellowish brown, fine SAND, some Silt, little medium Sand, trace coarse Sand, trace(-) fine Gravel, wet, loose	5.2
8	1016021	100		Olive brown, CLAY (varved), with fine Sand, trace Silt, stiff, wet	2.5
‡	1016022	100		Olive gray, varved CLAY, trace Silt, trace(-) fine Sand, stiff, wet	5.1
+12	1016023	100		As above	1.8
Ī	1016024	100		As above	1.3
16			-	Bottom of boring at 15.0'	
20					
24					



z

Printed On: 1/23/1998

Project: X-415 Area LEA Comm No: 68TR656 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Large Bore

Hours

Groundwater Observations:

Depth: NM At: **Start Date** 7/15/96 **End Date** 7/15/96

Boring ID

NK-SB-27

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing:

Depth:	At: Hours					
Elevation/ Depth	Sample Information			Sample Description		
	Sample No.	Recovery (%)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
	1016000	100		8": Black, fine SAND and SILT, some medium Sand, trace coarse Sand, moist, loose, organics; 15": Light reddish brown, fine SAND and medium SAND, some coarse Sand,	5.2	
‡	1016001	100	!	\trace(+) Silt, trace(-) fine Gravel, very moist, loose As above, strong hydrocarbon odor, wet at ≈3.0'	59.0	
+4	1016002	70		Yellowish brown, fine SAND, with medium Sand, some coarse Sand, little Silt, trace(-) fine Gravel, loose, wet	2.7	
‡	1016003	70		As above	2.9	
8	1016004	100		Olive brown, CLAY (varved), little Silt, trace fine Sand, stiff, wet	2.1	
†	1016005	100		Olive gray, varved CLAY, trace(+) Silt, trace(-) fine Sand, stiff, wet	3.4	
12	1016006	100		As above	2.4	
‡	1016007	100		As above	2.0	
16				Bottom of boring at 15.0'		
20						
+24						
Comments	n Porch	la bestfi	llad with h	entonite chips upon completion.		

Project: X-415 Area 68TR656 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** Geoprobe Large Bore Sampling Method:

Groundwater Observations: Depth: NM At: Hours Start Date 7/15/96 **End Date** 7/15/96

Boring ID

NK-SB-28

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing:

Depth:	At: Hours		Hours			
Elevation/ Depth	Sample Information			Sample Description		
	Sample No.	Recovery (%)	Biows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
ľ	1015991	100		7": Black, fine SAND and SILT, some medium Sand, trace coarse Sand, slightly moist, loose; 16": Light reddish brown, fine SAND and medium SAND, some coarse Sand,	5.0	
<u> </u>	1015992 1015993	100		trace Silt, trace(-) fine Gravel, very moist, loose As above, hydrocarbon odor, wet at ≈3.0'	55.0 51.0	
+4	1015994	80		Yellowish brown, fine SAND and medium SAND, some coarse Sand, trace Silt, trace(-) fine Gravel, wet, loose	3.6	
 	1015995	80		As above	3.9	
+ 8 1	1015996	95		Olive brown, varved CLAY, some Silt, little fine Sand, stiff, wet	2.0	
+	1015997	95	. <u>. </u>	Olive gray, CLAY, trace(+) Silt, trace (-) fine SAND, stiff, wet	1.9	
12	1015998	100		As above	2.1	
‡	1015999	100	:	As above	2.2	
16				Bottom of boring at 15.0'		
20						
† † † †						
24						
Comments	s: Boreho	ole backf	illed with be	entonite chips upon completion.	<u> </u>	

LEA Com Client: F Location: Drilling C Drilling M Sampling	Pratt & Whit East Hart ontractor: lethod: G Method: ater Observa	ford, CT LEA leoprobe Macro d		Start Date 7/24/96 End Date 7/24/96 SK-SB-2 Logged By: L. Bianchi Drilling Foreman: J. Klapheke Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	29
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1016355 1016356	100		Dark reddish brown, fine to coarse SAND, little fine Gravel,	125 125
‡	1016357	100		trace Silt, slightly moist, loose As above, moist	1000+
ţ	1016358	100		As above	810
‡	1016359	100		Reddish brown, fine to medium SAND, wet, slightly dense	290
12					
20	-				

Comments:

Borehole backfilled with bentonite chips upon completion.

Start Date Project: **VPSA Boring ID** 7/24/96 LEA Comm No: 68TR517 **End Date** Client: Pratt & Whitney **SK-SB-30** East Hartford, CT 7/24/96 Location: **Drilling Contractor:** Logged By: L. Bianchi Drilling Foreman: J. Klapheke Drilling Method: Geoprobe Drill Rig: Geoprobe 5400 Sampling Method: Macro core Surface Elevation: Groundwater Observations: Northing: Hou Depth: NM At: Hour Easting: At: Depth: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1016360 100 33 Dark reddish brown, fine to coarse SAND, little fine Gravel, trace Silt, moist, loose 100 19.0 1016361 Brown, fine(+) to medium SAND, some Silt, moist, slightly 1016362 100 \dense 6.5 As above 1016363 100 7.0 As above, wet Bottom of boring at 4.0' 12 Printed On: 1/23/1998 16 20 Boring Comments: Borehole backfilled with bentonite chips upon completion.

ocation: Orilling Co	ratt & Whit East Harti ontractor:	ford, CT LEA		Start Date 7/24/96 End Date 7/24/96 Logged By: L. Bianchi	
rilling Me ampling No roundwat epth: No epth:	Method: ter Observat M A	kt:	Hours Hours	Drilling Foreman: J. Klapheke Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
levation/ lepth	Sam Sample No.	Recovery	Blows /6*	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1016364	100		Dark reddish brown, fine to coarse SAND, little fine Gravel,	2.0
† I	1016365	100		trace Silt, moist, loose	1.4
+ 1	1016366	100		Brown, fine to medium SAND, trace Silt, moist, slightly \(\)	17.0
Į l	1016367	100		As above	12.0
‡4	1010307	1.00		As above, wet Bottom of boring at 4.0'	12.0
112					
24	Paraba	la haakfi	lled with h	entonite china unon completion	
Comments	: Boreno	ie dackti	n e u with De	entonite chips upon completion.	

	IC DOR		_ _	Page 1 of 1				
Project: LEA Comm	VPSA	TR517		Start Date 7/24/96 Boring II)			
Client: Pr	att & White	ney		Find Data				
Location:				7/24/96 SK-SB-3				
Drilling Co Drilling Me Sampling N Groundwat Depth: NI Depth:	ethod: Go Method: er Observat M A	LEA eoprobe Macro c ions: .t: .t:	ore Hours Hours	Logged By: L. Bianchi Drilling Foreman: J. Klapheke Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:				
Deptin.		ple Informat		Sample Description	Т			
Elevation/ Depth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)			
- 0	1016368	100		Yellowish brown, fine to coarse SAND, trace Silt, slightly moist, loose	3.2			
1 1	1016369	100		Reddish brown, fine(+) to coarse SAND, little Silt, moist,	2.4			
Į	1016370	100		slightly dense	1.9			
‡ !	1016371	100		As above Olive grey, SILT, trace fine Sand, wet, slightly dense	1.7			
+4				Bottom of boring at 4.0'				
‡								
<u>†</u>								
+ 1								
- 8								
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Comments: Borehole backfilled with bentonite chips upon completion.								
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3K-SB-32

VPSA Project: LEA Comm No: 68TR517 Client: Pratt & Whitney Location: East Hartford, CT LEA

Drilling Contractor: Drilling Method: Sampling Method: Geoprobe Macro core

Hours

Groundwater Observations: Depth: NM At: Depth:

7/24/96 **End Date** 7/24/96

Boring ID

SK-SB-33

Logged By: L. Bianchi
Drilling Foreman: J. Klar
Drill Rig: Geoprobe 5400
Surface Elevation: J. Klapheke

Northing: Easting:

Start Date

Depth:		At:	Hours	Easting:	
	San	nple Informa	etion	Sample Description	
Elevation/ Depth	Sample Ho.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
To	1016372	100		Dark reddish brown, fine(+) to coarse SAND, little fine Gravel, trace Silt, moist, loose	0.3
Ŧ	1016373	100		Yellowish brown, SILT and fine SAND, moist, slightly dense	0.5
Ŧ.	1016374	100		As above	0.4
Ŧ,	1016375	100		As above, wet	0.5
T *				Bottom of boring at 4'	
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$\frac{1}{2}$:		
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+12					
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+16			į		!
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‡					<u>'</u>
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+24					
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				rage 1 of 1	
Project: VPS/ LEA Comm No:	A : 681	rR517		Start Date 7/24/96 Boring	ID
Client: Pratt 8				Find Date	^-
		ord, CT		7/24/96 SK-SB-	34
Drilling Contractorilling Method Sampling Method Groundwater O Depth: NM Depth:	l: Ge od: i	t:		Logged By: L. Bianchi Drilling Foreman: J. Klaphel Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	(8
	Samp	ple Informat	ion	Sample Description	
Elevation/ Depth Sa	imple No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0 10	16376	100		Dark reddish brown, fine(+) to coarse SAND, with Silt, trace fine Gravel, slightly moist, loose	0.9
10	16377	100		Yellowish brown, fine(+) to medium SAND, trace Silt,	0.5
10	16378	100		∖moist, loose -As above	0.5
10	16379	100		As above As above, wet	0.2
†4 				Bottom of boring at 4.0'	
16	-				
Comments: 6	Borehol	e backfi	iled with be	entonite chips upon completion.	

3K-SB-34

Boring No: SK-SB-35

Project: VPSA Start Date **Boring ID** 7/24/96 LEA Comm No: 68TR517 Client: Pratt & Whitney **End Date SK-SB-35** Location: East Hartford, CT 7/24/96 LEA **Drilling Contractor:** Logged By: L. Bianchi Drilling Method: Geoprobe Drilling Foreman: J. Klapheke Geoprobe 5400 Sampling Method: Macro core Drill Rig: Surface Elevation: **Groundwater Observations:** At: Hours Northing: Depth: Depth: At: Hours Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Blows Sample No. Depth Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1016380 60 Dark reddish brown, fine to coarse SAND, trace Silt, trace 0.5 fine Gravel, slightly moist, loose 1016381 60 0.2 Yellowish brown, fine SAND, some Silt, moist, loose 1016382 60 Yellowish brown, fine to medium SAND, trace Silt, moist, 1.4 slightly dense 1016383 60 0.9 Yellowish brown, fine to coarse SAND, trace Silt, wet. Bottom of boring at 4.0' 20 Comments: Borehole backfilled with bentonite chips upon completion.

7

K-SB-36

Start Date Project: **VPSA Boring ID** 7/24/96 68TR517 LEA Comm No: Client: Pratt & Whitney **End Date** SK-SB-36 East Hartford, CT 7/24/96 Location: Logged By: L. Bianchi **Drilling Contractor: LEA** Drilling Method: Drilling Foreman: Geoprobe J. Klapheke Drill Rig: Geoprobe 5400 Sampling Method: Macro core Groundwater Observations: Surface Elevation: Depth: NM Hours Northing: At: Hours Easting: Depth: At: Sample Information Sample Description or, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1016384 100 0.1 Yellowish brown, fine SAND and SILT, moist, slightly dense 1016385 100 0.1 Brown, fine SAND, some Silt, moist, slightly dense 1016386 100 0.2 As above 1016387 100 0.1 As above, wet Bottom of boring at 4.0' 12 16 20 24 Boring Borehole backfilled with bentonite chips upon completion. Comments:

LEA Com	VPSA m No: 68	TR517	<u> </u>	Start Date 7/24/96 Boring ID	
Location:	ratt & Whit East Hart	ford, CT		End Date SK-SB-3	7
Drilling Control of Co	ethod: G Method: ter Observa M A	LEA ieoprobe Macro o tions: At:		Logged By: L. Bianchi Drilling Foreman: J. Klapheke Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
Берен.		aple Informa		Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
ļ°	1016388			Reddish brown, fine(+) to coarse SAND, little Silt,	0.2
‡	1016389	1		- slightly moist, loose Yellowish brown, fine to medium SAND, trace Silt, moist,	0.3
‡	1016392			slightly dense	0.2
+	1016393	 		As above	0.5
‡ 4				As above, wet Bottom of boring at 4'	
12					
Comments	s: Boreho	ole backfi	lled with be	entonite chips upon completion.	

Project: Linde Gas 68TR670 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT Start Date 8/27/96 **End Date** 8/27/96

Boring ID

SK-SB-38

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: **Macro Core**

At:

Groundwater Observations: Depth: NM At:

Depth:

Hours Hours

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing:

Easting:

Deptii.		76.	Alvars	Easting.	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1017409	100		4": Concrete; 3": Subbase; 5": Dark reddish brown, fine to medium SAND and SILT, little coarse Sand, trace fine Gravel, moist, slightly dense; 11": Yellowish brown, fine to	0.1
<u> </u>	1017410	100	_	medium SAND, some Silt, moist, slightly dense As above	0.3
+4	1017411	100		Dark brown, fine SAND, with Silt, some medium Sand, little coarse, very moist, slightly dense	2.6
†	1017412	100		Dark red, fine to medium SAND, with Silt, some coarse Sand, little fine Gravel, trace coarse Gravel, moist, very dense	3.2
+8	1017413	100		As above	33.0
	1017414	100		Dark brown, fine to medium SAND, some Silt, little coarse Sand, wet, slightly dense	72.0
+12	1017415	100		Dark grey, fine to medium SAND, some Silt, little coarse Sand, wet, loose	31.0
†	1017416	100		As above	7.6
16	1017417	100		Grey, medium to coarse SAND, some fine, trace Silt, trace(-) fine Gravel, wet, loose	1.0
†	1017418	100		Olive grey, varved CLAY, trace Silt, wet, stiff	0.0
20				Bottom of boring at 20.0'	
† †					
24					
1			11		
Comments	:: Boreho	ole backfi	lied with b	entonite chips upon completion.	

Project: Linde Gas LEA Comm No: 68TR670 Client: Pratt & Whitney East Hartford, CT Location: **Drilling Contractor: LEA**

Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations:
Depth: NM At:

Start Date 8/26/96 **End Date** 8/26/96

Boring ID

SK-SB-39

Logged By: L. Bianchi

Drilling Foreman: J.Swe Drill Rig: Geoprobe 5400 Surface Elevation: Northing: J.Sweeton

Depth: Depth:	NM		At: At:	Hours Hours	Northing: Easting:	
	\top	San	nple Informat	ion	Sample Description	
Elevation/ Depth		Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
+		1017386	100		3.5": Concrete; 2.5": Subbase; 17": Yellowish brown, fine to medium SAND, trace fine Gravel, trace(-) Silt, moist, slightly dense	0.2
Ī		1017387	100		Dark brown, fine SAND, some Silt, little medium Sand, trace coarse Sand, moist, slightly dense	0.4
+4		1017388	100		6": As above; 17": Dark brown, fine to medium SAND, with coarse Sand, little fine Gravel, trace(+) Silt, trace(-) coarse Gravel, moist, very dense	14.0
†		1017389	100		As above	85.0
-8		1017390	100		10": As above; 13": Light grey, fine to medium SAND, trace Silt, very moist, loose	150.0
‡		1017391	100		Greyish brown, fine and medium SAND, little coarse Sand, trace Silt, wet, loose	12.0
+12		1017392	100		Dark yellowish brown, medium SAND and fine SAND, little coarse Sand, trace Silt, wet, loose	1.2
†		1017393	100		Dark yellowish brown, medium SAND and fine SAND, some coarse Sand, trace(+) fine Gravel, trace(-) Silt, wet, loose	0.2
16		1017394	100		8": As above; 15": Grey, varved CLAY, trace Silt, wet, stiff	0.1
† †		1017395	100		As above	0.1
+ 20 +	· -				Bottom of boring at 20.0'	
T + +						
24						
Comme				Bod with t	ntonite chips upon completion.	

Project: Linde Gas 68TR670 LEA Comm No: Client: Pratt & Whitney East Hartford, CT Location: **Drilling Contractor:** LEA **Drilling Method:** Geoprobe Sampling Method: Maci Groundwater Observations: Macro Core Depth: NM Hours At: Hours Depth: At:

Start Date 8/27/96 End Date 8/27/96

Boring ID

SK-SB-40

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:
Sample Description

	San	nple Informat	tion	Sample Description	
levation/ lepth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1017398	100		4": Concrete; 3": Subbase; 6": Dark reddish brown, fine to medium SAND, little coarse, trace Silt, trace(-) fine Gravel, moist, slightly dense; 10": Yellowish brown, As	10.0
†	1017399	100		As above	0.3
1 4	1017400	100		Dark reddish brown, fine to medium SAND, with Silt, some coarse Sand, little fine Gravel, trace coarse Gravel, moist, very dense	7.0
‡	1017401	100		As above	8.6
8	1017402	100		Dark brown, medium SAND and fine SAND, some Silt, little coarse Sand, trace fine Gravel, very moist, dense	80.0
‡	1017403	100		3": As above; 20": Dark grey, medium to coarse SAND, some fine, trace Silt, wet, loose	150.0
+12 +	1017404 1017405	100	<u></u>	Dark grey, fine SAND, some Silt, trace medium Sand, slightly dense, wet	70.0
‡	1017406	100		As above	7.0
16	1017407	100		Yellowish grey, medium to coarse SAND, some fine Gravel, little fine Sand, trace Silt, wet, very loose	5.1
+	1017408	100		Olive grey, varved CLAY, trace Silt, wet, stiff	0.2
20				Bottom of boring at 20.0'	
+ + +					
+ 24					
<u> </u>					
Comments	s: Boreho	ole backfi	lled with	bentonite chips upon completion.	



Project: Linde Gas LEA Comm No: 68TR670 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geopro Sampling Method: Macr Groundwater Observations: Depth: NM At: Geoprobe Macro Core

Hours

Start Date 8/26/96 **End Date** 8/26/96

Boring ID

SK-SB-41

Logged By: L. Bi Drilling Foreman: L. Bianchi

J. Sweeton

Drill Rig: Geoprobe 5400 Surface Elevation:

Northing:

Depth:		At:	Hours	Easting:	
	Sar	nple Informat	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
+	1017375	100		3.5": Concrete; 2.5": Subbase; 17": Brown, fine SAND and SILT, trace medium Sand, trace(-) fine Gravel, subbase, loose, moist	1.0
† + +	1017376 1017377	100		Brown, fine to medium SAND, little Silt, trace coarse Sand, moist, loose	0.2
+4	1017378	100		12": As above; 11": Brown, fine to medium SAND, some coarse Sand, little fine Gravel, dense, very moist	4.2
† †	1017379	100		As above	58.0
+8	1017380	100		9": As above; 15": Grey, medium to coarse SAND, little fine Sand, trace Silt, very moist	300.0
† †	1017381	100		4": As above; 19": Yellowish brown, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, slightly dense	35.0
+12	1017382	83		As above	50.0
† †	1017383	83		As above	2.0
+16	1017384	100		15": As above; 8": Olive grey, varved CLAY, trace Silt, wet, stiff	6.0
+	1017385	100		As above	3.5
20				Bottom of boring at 20.0'	
‡					
24					
+					
Comment	s: Boreho	ole backfil	led with be	entonite chips upon completion.	



Linde Gas Project: 68TR670 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macr Groundwater Observations: Macro core

Depth: NM

Depth:

At: At: Hours Hours

Start Date 8/19/96 **End Date** 8/19/96

Boring ID

SK-SB-42

Logged By: L. Bianchi
Drilling Foreman: J.SweDrill Rig: Geoprobe 5400
Surface Elevation: J.Sweeton

Northing: Easting:

	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6°	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1017263	100		3": Concrete; 4": Subbase; 16": Brown, fine SAND, some medium Sand, little Silt, trace(+) coarse Sand, trace(-) fine Gravel, moist, moderately loose	0.0
‡	1017264	100		As above	1.0
+4	1017265	100		Reddish brown, medium SAND, some fine Sand, coarse Sand, little fine Gravel, wet, very dense	1.2
+	1017266	100	·	As above	1.6
-8	1017267	100		6": As above; 17": Dark reddish brown, medium SAND, with coarse Sand, some fine Gravel, little fine Sand, trace Silt, wet, very dense	1.6
<u> </u>	1017268	100		Light reddish brown, medium SAND, with coarse Sand, little fine Sand, trace Silt, wet, slightly dense	5.2
+12				Auger refusal at 12.0' Bottom of boring at 12.0'	
+16					
20					
24					
Comment	s: Boreho	ole backfi	lled with b	pentonite chips upon completion.	

Project: Linde Gas Start Date **Boring ID** 68TR670 LEA Comm No: 8/20/96 Client: Pratt & Whitney **End Date** SK-SB-43A Location: East Hartford, CT 8/20/96 Logged By: L. B Drilling Foreman: **Drilling Contractor:** LEA L. Bianchi Drilling Method: Geoprobe J.Sweeton Drill Rig: Geopr Surface Elevation: Sampling Method: Macro core Geoprobe 5400 Groundwater Observations: Depth: NM At: Hours Northing: Depth: At: Hours Easting: Sample Information Sample Description lor, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1017269 0.0 3.5": Concrete; 19.5": Brown, fine SAND, with Silt, moist, slightly loose 1017270 1017271 0.0 Yellowish brown, fine SAND, some Silt, little medium Sand, moist, loose 1017272 1.1 Reddish brown, fine to medium SAND, some coarse Sand, little Silt, trace(+) fine Gravel, very moist, dense 0.2 1017273 As above Bottom of boring at 7.0' (auger refusal on apparent 12 16 20 24 Boring No: SK-SB-43A Borehole backfilled with bentonite chips upon completion. Comments:

Project: Linde Gas LEA Comm No: 68 Start Date **Boring ID** 68TR670 8/28/96 Client: Pratt & Whitney **End Date** SK-SB-43B Location: East Hartford, CT 8/28/96 **Drilling Contractor:** LEA Logged By: L. Bianchi Drilling Foreman: **Drilling Method:** Geoprobe J. Sweeton Sampling Method: **Macro Core** Drill Rig: Geoprobe 5400 Groundwater Observations: Depth: NM At: Surface Elevation: Hours Northing: Hours Depth: At: Easting: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blaws Sample No. ecaver (%) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 100 N/A 4": Concrete; 3": Subbase, 8": Dark red, fine SAND and SILT, little medium Sand, moist, loose; 8": Dark yellowish brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, moist, slightly dense 100 N/A As above 50 N/A Dark reddish brown, fine to medium SAND, with Silt, some coarse Sand, little fine Gravel, trace coarse Gravel, moist, very dense 1017441 50 17.2 As above Bottom of boring at 8.0' refusal 12 Printed ë 6/16/1998 20 24 Boring Comments: Borehole backfilled with bentonite chips upon completion. **№** Project: Linde Gas
LEA Comm No: 68TR670
Client: Pratt & Whitney
Location: East Hartford, CT

Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro core
Groundwater Observations:
Depth: NM At: Hours
Depth: At: Hours

Start Date 8/21/96 End Date 8/21/96

Boring ID

SK-SB-44

Logged By: J. Klapheke
Drilling Foreman: J.Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing: Easting:

Depth:	At: Hours					
	Sar	nple Informa	ation		Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	ecovery Blows (%) /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
0	1017303	75		reddish bro Gravel, mo	t, 9": Subbase, augered - no recovery; 6": Dark wn, fine to coarse SAND, with fine to medium ist to wet, loose to moderately dense,	1.2
	1017304	75		As Above	d Gravei	1.0
+4	1017305	96		Olive grey	rey, fine SAND, trace Silt, wet, dense; 17": to reddish brown, fine(+) to coarse SAND, trace dense, wet	1.0
†	1017306	96			to reddish brown, fine(+) to coarse SAND, trace of dense, wet, slight coarsening at bottom 6", nents	1.3
†8 †	1017307	25			brown, fine to coarse(+) SAND, trace Silt, wet, Light greyish brown, fine SAND, trace Silt, wet,	1.0
‡ †	1017308	25		As Above		0.9
12	1017309	63		Olive grey,	CLAY, trace fine Sand, trace Silt, wet, dense	0.9
· ‡	1017310	63		As Above		0.9
16				Bottom of	boring at 16'	
20						
-24						
+						
Comment	s: Boreh	ole backt	filled with b	entonite chip	s upon completion.	

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Project: Linde Gas Start Date **Boring ID** LEA Comm No: 68TR670 8/21/96 Client: Pratt & Whitney **End Date** SK-SB-45 Location: East Hartford, CT 8/21/96 Logged By: J. Kl Drilling Foreman: J. Klapheke **Drilling Contractor:** LEA Drilling Method: J.Sweeton Geoprobe Sampling Method: Macro core Drill Rig: Geoprobe 5400 Surface Elevation: Groundwater Observations: Depth: NM Hours Northing: At: Easting: Hours Depth: At: Sample Description Sample Information Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1017294 78 3" pavement and 9" sub-base-augered; 7": Dark reddish 0.1 brown, fine to coarse SAND, little fine Gravel, trace Silt, slightly moist, loose 1017295 78 0.4 As Above 1017296 62 1.0 As above, moist to wet, occasional light grey brown, fine to coarse SAND lense 63 1017297 0.5 As Above 1017298 1017300 63 0.9 As above, slight coarsening downwards, wet 1.8 1017299 75 As Above 12 1017301 88 0.2 12": As above; 9": Olive grey, CLAY, trace Silt, trace fine Sand, dense, wet 1017302 88 0.2 As Above Bottom of boring at 16' 20 Boring Comments: Borehole backfilled with bentonite chips upon completion.

Start Date Project: Linde Gas **Boring ID** 68TR670 8/20/96 LEA Comm No: Client: Pratt & Whitney **End Date** SK-SB-46 Location: East Hartford, CT 8/20/96 **Drilling Contractor:** LEA Logged By: L. Bianchi J.Sweeton Drilling Method: Geoprobe Drilling Foreman: MC to 4'; LB from 4' Drill Rig: Geoprobe 5400 Sampling Method: Surface Elevation: Groundwater Observations: Northing: Depth: NM Hours Hours Easting: Depth: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth ecovery (X) Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1017274 100 0.0 1": Asphalt; 22": Red, fine to medium SAND, some coarse Sand, little fine Gravel, trace Silt, moist, dense 1017275 100 0.1 21": As above; 2": Olive grey, fine SAND, little Silt, moist, slightly dense 1017276 100 0.1 Olive brown, fine SAND, with medium Sand, little coarse Sand, trace Silt, slightly dense, wet 1017277 100 0.0 As above 1017278 100 0.1 As above 1017281 100 0.2 Yellowish brown, fine to medium SAND, some coarse Sand, little Silt, wet, loose 12 1017282 100 0.0 12": As above; 12": Olive grey, varved CLAY, trace Silt, wet, stiff 1017283 100 **Printed** On: 1/22/1998 0.0 As above Bottom of boring at 15.0' 16 20 Comments: Borehole backfilled with bentonite chips upon completion.

Start Date 8/20/96 End Date 8/20/96

Boring ID

SK-SB-47

LEA **Drilling Contractor:** Drilling Method: Geoprobe

Sampling Method: Macro Core

Groundwater Observations: Depth: NM At: Depth:

Project: Linde Gas LEA Comm No: 68

Client: Pratt & Whitney

Location: East Hartford, CT

At:

Hours

Hours

68TR670

Logged By: L. Bi Drilling Foreman: L. Bianchi J.Sweeton Drill Rig: Geopte Surface Elevation: Northing: Geoprobe 5400

Easting:

	San	aple Informs	ition	Sample Description	
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1017284	25		2": Asphalt; 4": Red, fine to medium SAND, some coarse Sand, little fine Gravel, trace Silt, moist, dense	0.0
†	1017285	25		As above	0.0
+4	1017286	50		Olive grey, fine SAND, with medium Sand, little coarse Sand, trace Silt, slightly dense, wet	0.0
† †	1017287	50		As above	0.1
+8	1017288	100		As above	0.1
†	1017289	100		As above	0.0
12	1017290	100	 	Olive grey, varved CLAY, trace Silt, wet, stiff	0.0
+	1017291	100		As Above	0.0
16				Bottom of boring at 15'	
20					
24					
Comments	: Boreho	le backfi	lled with be	entonite chips upon completion.	1

GEOLOGIC BORING LOG Page 1 of 1 Start Date Project: Linde Gas **Boring ID** LEA Comm No: 8/22/96 68TR670 Client: Pratt & Whitney **End Date SK-SB-48** Location: East Hartford, CT 8/22/96 Logged By: L. Bianchi **Drilling Contractor:** LEA J.Sweeton Geoprobe Drilling Foreman: **Drilling Method:** Geoprobe 5400 Macro Core Drill Rig: Sampling Method: Surface Elevation: **Groundwater Observations:** Northing: Depth: NM Hours Hours Easting: Depth: At: Sample Information Sample Description olor, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1017338 75 Brown, SILT and fine SAND, slightly moist, loose, root 0.0 fragments 75 0.0 1017339 Brown, fine SAND, some SILT, little medium Sand, trace(+) coarse Sand, trace(-) fine Gravel, moist, loose 1017340 75 0.1 As above, very moist

1017341 75 Brown, fine to medium SAND, trace Silt, wet, loose 0.4 50 1017342 0.3 Brown, fine to medium SAND, little coarse Sand, trace Silt, wet, loose 1017343 50 0.0 As above 12 1017344 100 0.0 Olive grey, varved CLAY, trace Silt 100 1017345 0.0 As above Bottom of boring at 15.0' 16 20

Comments:

Borehole backfilled with bentonite chips upon completion.



Printed On: 1/22/1998

Project: Linde Gas LEA Comm No: 68TR670 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations: Depth: NM At: Hours Start Date 8/22/96 **End Date** 8/22/96

Boring ID

SK-SB-49

Logged By: L. Bianchi Drilling Foreman: J.

J.Sweeton Drill Rig: Geoprobe 5400 Surface Elevation:

Northing:

Depth:		At:	Hours	Easting:	
	Sar	nple Informa	tion	Sample Description	Ţ
Elevation/ Depth	Sample No.	Recovery (2)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T °	1017321	75		Brown, SILT and fine SAND, slightly moist, loose, root fragments	0.0
† †	1017322	75		Brown, fine SAND, some Silt, little medium Sand, trace(+) coarse Sand, trace(-) fine Gravel, moist, loose	0.0
+4	1017323 1017324	75		As above, very moist	0.0 0.1
<u> </u>	1017325	75		Brown, fine to medium SAND, trace Silt, wet, loose	0.0
8	1017326	75		Brown, fine to medium SAND, little coarse Sand, trace Silt, wet, loose	0.2
‡	1017327	75		Dark yellowish brown, fine to medium SAND, little coarse Sand, trace Silt, wet, loose	0.0
+12	1017328	100		12": Olive brown, fine to medium SAND, some coarse Sand, trace Silt, wet, loose; 11": Olive grey, varved CLAY, little Silt, wet, very stiff	0.0
‡	1017329	100		As above	0.0
16				Bottom of boring at 15.0'	
20					
24					
Comments	: Boreho	ole backfi	lled with he	entonite chips upon completion.	

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LEA Com	ratt & White East Hartf	TR670 ney ford, CT LEA		O/ZZ/30	ng ID B-50
Drilling M Sampling I	ethod: G Method: ter Observat M A	eoprobe Macro C	Core Hours Hours	Drilling Foreman: J.Swee Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	eton
	Sam	ple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (火)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1017330	75		Brown, fine SAND and SILT, trace medium Sand, slight moist, loose, root fragments	γ 0.0
† †	1017331	75	:	As above, moist	0.0
+4	1017332	75		Brown, fine to medium SAND, with Silt, trace coarse Samoist, loose	and, 0.4
†	1017333	75		As above, wet	7.5
+8	1017334	75		Brown, medium SAND, with fine Sand, some coarse Sa little fine Gravel, trace Silt, wet, loose	nd, 0.2
† † †	1017335	75		Yellowish brown, medium to coarse Sand, with fine Sar little fine Gravel, trace Silt, wet, very loose	nd, 0.0
+12	1017336	100		Olive grey, varved CLAY, trace Silt, wet, very stiff	0.0
†	1017337	100		As above	0.0
16 + + + + + +				Bottom of boring at 15.0'	
Comments	Boreho	le backfi	iled with be	ntonite chips upon completion.	

Printed On: 1/22/1998

roject: Li EA Comm lient: Pra ocation:	No: 687	TR670		Start Date	Boring ID
lient: Pra		1 KO/U			PULLE III
	771111	nev		0/21/90 End Date	J
	East Hartf			8/21/96	SK-SB-51
rilling Con Filling Met ampling Me	tractor: hod: G	LEA eoprobe Macro C	ore	Logged By: J. Klaphe	.Sweeton
roundwate epth: NM	r Observat	ions: .t:	Hours	Surface Elevation: Northing:	
epth:		t:	Hours	Easting:	
	Sam	ple Informati	ion	Sample Description	
levation/ epth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Size, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesivenes	(ppm
0	1017311	88		8": Topsoil, dark reddish brown, rooted; 13": Dark brown, fine(+) to medium SAND, little Silt, slightly to moist, slightly dense, paper fragments	reddish 0.1 moist
	1017312	88		As Above	0.3
+4	1017313	67		12": As above; moist to wet; 4": Light greyish brofine to coarse(+) SAND, little very fine Gravel, we	wn, 0.5 t, loose
+ -	1017314	67		As Above	0.6
†8 	1017315	63		10": As above; 5": Light grey brown, fine SAND, wet, slightly dense	trace Silt, 5.5
	1017316	63		5": As Above; 10": Reddish brown, fine to coarse SAND, wet, loose	(+) 2.2
12	1017317	88		As above	0.8
‡	1017318	88		3": As Above; 18": Olive grey, CLAY, varved, were dark reddish brown, very fine Sand and Silt on var	t, dense, 2.9 ves
16				Bottom of boring at 16'	
20					
†				·	
24					
<u> </u>					
Comments:	Boreho	le backfil	led with be	entonite chips upon completion.	

Project: Linde Gas 68TR670 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT

LEA **Drilling Contractor:** Drilling Method: Geoprobe Sampling Method: Macr Groundwater Observations: Macro Core

Depth: NM Depth:

At: At:

Start Date 8/28/96 **End Date** 8/28/96

Boring ID

SK-SB-52

Logged By: L. Bianchi
Drilling Foreman: J. Swo
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

7				
San	opie Informati	on	Sample Description	
Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ррп
1017419 1017420	100		Light brown, fine SAND and SILT, trace medium Sand, moist, loose, root fragments	0.0 0.2
1017421	100		As above	0.2
1017424	100		Dark brown, fine SAND and SILT, trace medium Sand, very moist, slightly dense	0.9
1017425	100		Greyish brown, fine to medium SAND, some Silt, little coarse Sand, trace fine Gravel, wet, loose	2.5
1017426	100		Olive brown, medium SAND, with fine Sand, some coarse Sand, little Silt, wet, loose	3.1
1017427	100		Yellowish grey, fine to medium SAND, some coarse Sand, little Silt, wet, loose	7.2
1017428	20		Yellowish grey, medium SAND and coarse SAND, some fine Sand, little fine Gravel, trace Silt, wet, very loose	0.3
1017429	20		Olive grey, varved CLAY, trace Silt, wet, slightly stiff	0.1
			Bottom of boring at 15.0'	
	1017419 1017420 1017421 1017424 1017425 1017426 1017427	1017419 1017420 100 1017421 100 1017424 100 1017425 100 1017426 100 1017427 100	1017419 100 1017420 100 1017421 100 1017424 100 1017425 100 1017426 100 1017427 100	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness

	Linde Gas	70070		Start Date Boring I	D
LEA Com Client: P	m No: 68 ratt & Whit	TR670		6/25/50 End Date	
	East Hart			8/29/96 SK-SB-5	3
Drilling M Sampling I Groundwa	Method: iter Observa IM	LEA ieoprobe Macro C tions: At:	Core Hours Hours	Logged By: L. Bianchi Drilling Foreman: J. Sweetor Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	1
		nple Informat		Sample Description	T
Elevation/ Depth	Sample No.	Recovery (欠)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T °	1017444	100		10": Dark brown, fine SAND and SILT, little coarse Gravel, trace medium Sand, loose, moist; 13": Reddish brown, fine to medium SAND and coarse SAND, some fine Gravel, little	
‡	1017445	100	·	coarse Gravel, trace fine Cobbles, dense, moist 15": As above; 7": Black, fine SAND, some medium Sand, little Silt, slightly dense, moist, hydrocarbon odor; 1":	
+4	1017446	100		Reddish brown, fine to medium SAND and coarse SAND, some fine Gravel, little coarse Gravel, trace fine Cobbles, moist, dense	
† †	1017447 1017448	100		17": As above; 6": Grey, fine SAND, little Silt, very moist, loose Olive grey, fine to medium SAND, little coarse Sand, trace(+) Silt, trace(-) fine Gravel, wet, loose	1
+8	1017449	50		Dark grey, fine SAND, trace Silt, wet, loose	
Ĭ	1017450	50		12": As above; 11": Grey, fine to medium SAND, little Silt, trace coarse Sand, trace(-) fine Sand, loose, wet	
12	1017451	100		As above	
. ‡	1017452	100		6": As above; 6": Olive grey, varved CLAY, trace Silt, wet,	
16				Bottom of boring at 15.0'	
+ + 20 + +					
24					
Comment	s: Boreho	ele backfil	led with be	entonite chips upon completion.	



Linde Gas Project: LEA Comm No: 68TR670 Client: Pratt & Whitney
Location: East Hartford, CT

Drilling Contractor:
Drilling Method: Geoprobe Sampling Method: Macro Core

Groundwater Observations: Depth: NM

Hours

Start Date 8/23/96 **End Date** 8/23/96

Boring ID

SK-SB-54

Logged By: L. Bianchi

Drilling Foreman: J.Swe Drill Rig: Geoprobe 5400 Surface Elevation: J.Sweeton

Northing: Easting:

Depth:		At:	Hours	Easting:	
	San	nple Informa	ition	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
·	1017348	75		Brown, fine SAND and SILT, trace(-) medium Sand, moist, loose, root fragments	0.0
†	1017349	75		Brown, fine SAND, some Silt, trace medium Sand, moist, loose	0.2
+4	1017350	75		Reddish brown, fine SAND, some Silt, little medium Sand, trace coarse Sand, moist, loose	0.5
<u> </u>	1017351 1017352	75		Grey, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, loose	0.2
-8	1017353	100		As above	0.3
Ī	1017354	100		Dark yellowish brown, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, loose	4.5
12	1017355	100	. .	Dark grey, medium to coarse SAND, with fine Sand, some Silt, loose, wet	0.2
· †	1017356	100		As above	0.0
16				Bottom of boring at 15.0' (varved CLAY at 15.0')	
20					
+24					
Comments	: Boreho	ole backf	illed with h	entonite chips upon completion.	

Printed On: 1/22/1998

Project: Linde Gas LEA Comm No: 68TR670 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** Drilling Method: Sampling Method: Geoprobe Macro Core **Groundwater Observations:**

Start Date 8/23/96 End Date 8/23/96

Boring ID SK-SB-55

Logged By: L. Bianchi
Drilling Foreman: J.Swe
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing: J.Sweeton

Depth: Depth:		At: At:	Hours Hours	*	Northing: Easting:	
	San	nple Informa	tion		Sample Description	
Zlevation/ Depth	Sample No.	Recovery (X)	Blows /6"		Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1017365	.100			ddish brown, fine SAND, with Silt, slightly moist, loose, of fragments	0.0
‡	1017366	100		As	above	0.0
14	1017367				": As above; 12": Grey, fine SAND, little medium Sand, ce Silt, very moist, loose	0.0
‡	1017368			12 tra	": As above; 11": Light grey, fine SAND, little Silt, ce medium Sand, wet, loose	0.1
+8	1017369			As	above	0.2
Ī Į	1017370				rk yellowish brown, medium SAND, some fine Sand, little arse Sand, trace Silt, wet, loose	0.3
+12	1017371				rk grey, medium to coarse SAND, some fine Sand, little t, wet, loose	0.0
. ‡	1017372			As	above	0.0
16				Bot	ttom of boring at 15.0'; varved CLAY at ≈ 15.0' to 15.5'	
20						
24						
Comments	: Boreho	de backfi	lled with be	entor	nite chips upon completion.	

Boring ID

SK-SB-56

Project: Linde Gas LEA Comm No: 68TR670	Start Date Boring II
Client: Pratt & Whitney Location: East Hartford, CT	End Date 8/23/96 SK-SB-5
Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro Core Groundwater Observations: Depth: NM At: Hours Depth: At: Hours	Logged By: L. Bianchi Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:

Sample Information		ion	Sample Description			
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm	
0	1017357	100		Light reddish brown, fine SAND and SILT, slightly moist, loose, root fragments	0.8	
‡	1017358	100		Reddish brown, fine SAND, some Silt, trace(-) coarse Gravel at ≈ 3.75', loose from 2-3.75', dense at 3.75-4.00', moist	0.7	
† 4	1017359	100		10": As above; 13": Bluish grey, fine SAND, little medium Sand, trace Silt, very moist, loose	0.0	
‡	1017360	100	- · · · · · · · · · · · · · · · · · · ·	12": As above; 11": Light greyish brown, fine SAND and medium SAND, some Silt, little coarse Sand, wet, loose	0.0	
+8	1017361			As above	0.1	
Ī	1017362			Dark yellowish brown, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, loose	0.2	
12	1017363			Dark grey, medium to coarse SAND, some fine Sand, little Silt, wet, loose	0.0	
‡	1017364			As above	0.0	
16				Bottom of boring at 15.0'; varved CLAY at ≈ 15.0' to 15.5'		
+20 +						
24						
+	1	1				

Comments:

Borehole backfilled with bentonite chips upon completion.

Project: Linde Gas **Start Date** Boring ID LEA Comm No: 68TR670 8/28/96 Client: Pratt & Whitney **End Date SK-SB-57** Location: East Hartford, CT 8/28/96 Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: **Drilling Contractor:** Drilling Method: Sampling Method: Geoprobe Macro Core Groundwater Observations:

Depth: NM At: Hours , Depth: At: Hours Easting:

J. Sweeton Northing:

7	San	nple Informa	tion	Sample Description	r
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1017430	100		Light brown, fine SAND, some Silt, moist, loose, root fragments	0.0
† †	1017434	100	· · · ·	Brown, fine SAND, with Silt, trace medium Sand, moist, loose	0.0
4	1017435	100		6": As above; 17": Light bluish grey, SILT, with fine SAND, very moist, slightly stiff	1.8
†	1017436	100		Light reddish grey, medium to coarse SAND, some fine Sand, little fine Gravel, trace Silt, wet, loose	0.6
-8	1017437	25		Yellowish brown, fine SAND, with medium Sand, some Silt, little coarse Sand, wet, loose	0.8
† †	1017438	25		As above	0.0
12	1017439	100		As above	0.1
1	1017440	100		6": As above; 6": Olive grey, varved CLAY, trace Silt, wet, stiff	0.0
16				Bottom of boring at 15.0'	
20					
24					
Comments	: Boreho	le hackf	illed with I	pentonite chips upon completion.	

Borehole backfilled with bentonite chips upon completion.



Start Date Project: Tie Down **Boring ID** LEA Comm No: 68TR671 9/4/96 Client: Pratt & Whitney **End Date SK-SB-58 Location:** East Hartford, CT 9/4/96 **Drilling Contractor:** LEA Logged By: L. Bianchi Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Drilling Method: Sampling Method: Geoprobe Macro core **Groundwater Observations:** Depth: NM At: Depth: At: Easting:

Depth:	<i>F</i>	At:	Hours	Easting:	
	San	nple Informati	ion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
10	1017805	100		Dark olive grey, fine SAND and SILT, trace medium Sand, moist, loose, rip rap	0.6
† †	1017806	100		Light yellowish brown, fine SAND, little Silt, trace medium Sand, moist, very loose	0.0
+4	1017807	100		As above	7.4
+	1017808	100		Dark olive brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel	0.1
+8	1017809 1017810	100		As above, wet	1.5 1.3
† †	1017811	100		Dark yellowish brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, loose	0.0
+12	1017812	100	17 17	Olive grey, varved CLAY, little Silt, wet, slightly stiff	0.0
ł	1017813	100		As above	0.0
16				Bottom of boring at 15.0'	
20					
24					
Comments	: Boreho	ole backfil	led with he	entonite chips upon completion.	



Printed On: 1/22/1998

Depth: N Depth:		At: At:	Hours Hours	Northing: Easting:	
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T °	1017760	100		Dark brown, fine SAND, some Silt, little medium Sand, moist, loose	3.2
 	1017761	100		Olive brown, fine SAND, some Silt, loose, moist	122.
‡4	1017762	100		Light olive brown, fine to medium SAND, trace Silt, trace(-) coarse Sand, loose, moist	125.
+	1017763	100		As above, wet	0.2
	1017764	100		As above	0.6
† † †	1017765	100		6": As above; 5": Dark yellowish red, fine to medium SAND, trace Silt, wet, loose; 12": Light olive brown, fine to medium SAND, trace Silt, trace(-) coarse Sand, loose, wet	0.1
†12 1	1017766	100		Grey, varved CLAY, some Silt, wet, slightly stiff	0.0
†	1017767	100		As above	0.0
16				Bottom of boring at 15.0'	
20					
-24					

Comments:

Printed On: 1/22/1998

Borehole backfilled with bentonite chips upon completion.

Project: Tie Down LEA Comm No: 68TR671 Client: Pratt & Whitney
Location: East Hartford, CT Drilling Contractor: Drilling Method: LEA Geoprobe Sampling Method: Macro core **Groundwater Observations:** Depth: NM Hours

Start Date 9/3/96 End Date 9/3/96

Boring ID

SK-SB-60

Logged By: L. Bianchi
Drilling Foreman: J. Swo
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing:

Depth:	At: Hours			Easting:			
	San	nple Informa	ation	Sample Description			
Elevation/ Depth	Sample No.	Recovery (え)	Blows /6"	olor, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
10	1017770	74		Dark yellowish red, medium SAND, some fine, little coarse, trace fine Gravel, trace(-) Silt, moist, dense	2.0		
†	1017771	74		10": As above; 7": Olive brown, fine SAND, with Silt, trace(-) medium Sand, loose, moist	0.0		
†4	1017772 1017773	100		Yellowish brown, fine SAND, some medium Sand, little Silt, moist, loose	1.0		
+++++++++++++++++++++++++++++++++++++++	1017774	100		Olive brown, medium SAND, with fine Sand, some coarse Sand, trace(+) Silt, trace(-) fine Gravel, wet, loose	0.0		
+8	1017775	100		As above	13.0		
† †	1017776	100		20": Dark olive brown, fine to medium SAND, some coarse, little Silt, wet, loose; 3": Olive grey, varved CLAY, trace Silt, wet, stiff	14.0		
+12	1017777	100		Olive grey, varved CLAY, trace Silt, wet, stiff	1.0		
Ī	1017778	100		As above	0.0		
16				Bottom of boring at 15.0'			
20							
-24							
Comment	s: Boreho	ole backf	illed with be	entonite chips upon completion.			

Project: Tie Down **Start Date Boring ID** LEA Comm No: 68TR671 9/4/96 Client: Pratt & Whitney **End Date** SK-SB-61 Location: East Hartford, CT 9/4/96 **Drilling Contractor:** Logged By: L. Bianchi Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 J. Sweeton Drilling Method: Geoprobe Sampling Method: Macro core Surface Elevation: **Groundwater Observations:** Depth: NM Hours At: Northing: Hours Easting: Depth: At: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Blows Sample No. Depth Recovery (%) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1017822 100 3.6 Brown, fine SAND and SILT, trace medium Sand, moist, loose, root fragments 1017823 100 0.1 Light pinkish brown, fine SAND, some Silt, trace medium Sand, moist, loose 1017824 100 Yellowish brown, fine SAND, some Silt, trace medium 1.3 Sand, moist, loose 1017825 100 40.0 Dark olive brown, fine to medium SAND, some Silt, little coarse Sand, trace fine Gravel, moist, loose 8 4.2 1017826 22 As above, wet 1017827 22 3.9 As above 12 1017828 100 0.1 Olive grey, varved CLAY, trace(+) Silt, wet, stiff 1017829 100 0.0 As above Bottom of boring at 15.0' 16 20

Comments:

Borehole backfilled with bentonite chips upon completion.

Boring

Z.

Project: Tie Down LEA Comm No: 68TR671 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Sampling Method: Geoprobe

Macro core Groundwater Observations: Depth: NM At:

Hours Depth: At: Hours Start Date 9/3/96 **End Date** 9/3/96

Boring ID

SK-SB-62

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

Depth:		At:	Hours	Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (光)	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
0	1017779	43		5": Dark red, medium SAND, with fine Sand, some coarse Sand, little Silt, trace fine Gravel, moist, dense; 5": Yellowish grey, fine SAND and SILT, trace(-) medium Sand, moist, slightly loose*	0.0
	1017780	43		10": Light greyish brown, fine SAND, little Silt, moist, loose*	2.6
+4	1017781	100		As above	0.4
<u> </u>	1017782	100		Dark olive grey, fine to medium SAND, some coarse Sand, trace(+) Silt, trace(-) fine Gravel, wet, loose	12.0
+8	1017783	100		Dark yellowish brown, fine to medium SAND, some coarse Sand, trace(+) fine Gravel, trace(-) Silt, wet, loose	7.1
‡	1017784	100	· · · · · · · · · · · · · · · · · · ·	As above; 3": Olive grey, varved CLAY, trace Silt, wet, stiff	0.1
12	1017785	100		As above	0.0
‡	1017786	100		As above	0.0
+16 +			;	Bottom of boring at 15.0'	
20					
1					
+ 24					
Comments	s: Boreho	ole backf	illed with b	entonite chips upon completion.	<u> </u>

* augered ≈ 15" through rock/gravel layer

Depth: NM

Project: Tie Down LEA Comm No: 68TR671 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: **LEA** Geoprobe Sampling Method: Macro core **Groundwater Observations:**

Hours

Start Date 9/3/96 **End Date** 9/3/96

Boring ID SK-SB-63

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing:

Sample No. 1017787 1017788 1017789 1017790	74 100	Blows /6*	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 7": Dark red, medium SAND, with fine Sand, some coarse Sand, little Silt, trace fine Gravel, moist, dense; 10": Light pinkish grey, fine to medium SAND, trace coarse Sand, trace(-) Silt, moist, loose As above Light olive grey, fine to medium SAND, little coarse Sand, trace Silt, very moist, loose Dark reddish yellow, fine to medium SAND, some Silt, little	(ppm) 1.4 1.4
No. 1017787 1017788 1017789	74	Blows /6*	Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness 7": Dark red, medium SAND, with fine Sand, some coarse Sand, little Silt, trace fine Gravel, moist, dense; 10": Light pinkish grey, fine to medium SAND, trace coarse Sand, trace(-) Silt, moist, loose As above Light olive grey, fine to medium SAND, little coarse Sand, trace Silt, very moist, loose	1.4
1017788 1017789 1017790	74		Sand, little Silt, trace fine Gravel, moist, dense; 10*: Light pinkish grey, fine to medium SAND, trace coarse Sand, trace(-) Silt, moist, loose As above Light olive grey, fine to medium SAND, little coarse Sand, trace Silt, very moist, loose	1.4
1017789 1017790	100		As above Light olive grey, fine to medium SAND, little coarse Sand, trace Silt, very moist, loose	
1017790			trace Silt, very moist, loose	0.4
	100		Dark raddish vallow fine to madium SAND some Silt little	
1017791			coarse Sand, wet, loose	0.1
	100		Light pinkish grey, fine SAND and SILT, wet, loose	1.1
1017792	100		Light pinkish grey, fine SAND and SILT, some medium Sand, trace coarse Sand, wet, loose; 2" Olive grey, varved CLAY, trace Silt, wet, stiff	125.0
1017793	100		As above	1.0
1017794	100	•	As above	0.0
			Bottom of boring at 15.0'	
	1017794	1017793 100	1017793 100	trace coarse Sand, wet, loose; 2" Olive grey, varved CLAY, trace Silt, wet, stiff 1017794 100 As above

Project: Tie Down LEA Comm No: 68TR671 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Geoprobe Sampling Method: Macr Groundwater Observations: Macro core

Depth: NM

Hours

Start Date 9/3/96 End Date 9/3/96

Boring ID

SK-SB-64

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing:

Depth:	4	At:	Hours	Easting:	
	San	nple Informa	ıtion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1017795	43		Dark brown, fine SAND, with medium Sand, some Silt, trace coarse Sand, moist, slightly dense	0.3
† + +	1017796	43		Light yellowish brown, fine SAND, with Silt, trace medium Sand, moist, loose	0.0
+4	1017797	100		Light olive grey, fine SAND, with Silt, trace medium Sand, moist, loose	3.8
† †	1017798	100		Olive brown, fine to medium SAND, some Silt, trace(-) coarse Sand, wet, loose	12.0
+8	1017799	100		Olive brown, fine to medium SAND, with coarse Sand, little Silt, trace fine Gravel, wet, loose	0.3
‡	1017800	100		20": Dark yellowish brown, fine to medium SAND, some Silt, little coarse Sand, trace fine Gravel, wet, loose; 3": Olive grey, varved CLAY, trace Silt, stiff, wet	0.1
+12				No recovery	
Ŧ				No recovery	
16				Bottom of boring at 15.0'	
÷ 20					
· †					
+24					
Comment	s: Boreho	ole backf	illed with be	entonite chips upon completion.	٠

				rage I of I	
Project: LEA Comm	Tie Down	TR671		Start Date Boring ID)
	n No: 68			S/S/SO	
ocation:	East Hart			9/5/96 SK-SB-65	5
rilling Mo ampling N	Aethod: ter Observa M	LEA Geoprobe Macro c tions: At:	ore Hours Hours	Logged By: L. Bianchi Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
7		nple Informat		Sample Description	
levation/ epth	Sample No.	Recovery (火)	Blows /6*	olor, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1017850	100		Dark brown, fine SAND and SILT, trace medium Sand, slightly moist, loose, root fragments	0.0
+	1017851	100		Light pinkish grey, fine SAND, some Silt, trace medium Sand, moist, loose	0.0
+4	1017858	100		Grey, fine SAND, some Silt, trace medium Sand, moist, loose	0.8
†	1017859	100		6": As above; 17": Olive brown, fine to medium SAND, little coarse Sand, trace Silt, wet, loose	40.0
+8	1017860	100		As above	52.0
+	1017861	100		17": Dark yellowish brown, fine to medium SAND, little Silt, trace coarse Sand, wet, very loose; 6": Olive grey, varved CLAY, trace Silt, wet, stiff	0.0
+12	1017862	100		As above	0.0
‡	1017863	100	- ;	As above	0.0
16				Bottom of boring at 15.0'	
20					
24					
Comments	: Boreho	ole backfi	lled with be	entonite chips upon completion.	

LEA Comm	ie Down			Start Date Doming D	
Cliente Pro		TDC74			D
Lancaria Fig	att & White	TR671		9/5/90	
	East Hartf			9/5/96 SK-SB-6	6
Drilling Con Drilling Med Sampling M Groundwate Depth: NN	thod: Golethod: lethod: er Observat M A	lt:	Hours	Logged By: L. Bianchi Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing:	
Depth:		kt:	Hours	Easting:	
L	Sam	ple Informati	ion	Sample Description	4
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	olor, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
+ 0	1017842	100		Brown to light brown, fine SAND and SILT, trace medium Sand, slightly moist, loose, root fragments	1.7
	1017843	100		As above	0.0
+4	1017844	100		Light greyish brown, fine to medium SAND, little coarse Sand, trace Silt, moist, loose	2.7
	1017845	100		As above, wet	16.0
+8	1017846	100		Dark yellowish brown, fine to medium SAND, little Silt, trace coarse Sand, wet, very loose	11.0
	1017847	100		15": As above; 8": Olive grey, varved CLAY, trace Silt, wet stiff	0.1
12 + 12 + 12 + 14 + 15 + 15 + 15 + 15 + 15 + 15 + 15	1017848	100		As above	0.0
	1017049	100		As above	0.0
				Bottom of boring at 15.0'	
+16 + - - - - - - - - - - - - - - - - - -					
+				·	
- 24			;		
Comments	Boreho	le backfil	led with be	entonite chips upon completion.	



Geoprobe

Macro core

Drilling Method: Sampling Method:

Depth: NM

Groundwater Observations:

Project: Tie Down LEA Comm No: 68TR671 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA

Hours

Start Date 9/5/96 **End Date** 9/5/96

Boring ID

SK-SB-67

L. Bianchi Logged By:

Drilling Foreman: J. Sweeton

Drill Rig: Geoprobe 5400 Surface Elevation:

Northing:

Depth:	IAIAI		At:	Hours	Easting:	
		San	nple Informat	ion	Sample Description	
Elevation/ Depth		Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10		1017833	78		Light brown, fine SAND and SILT, trace medium Sand, slightly moist, very loose, root fragments	0.0
ŧ		1017834	78		As above	0.0
+4	1	1017835 1017836	100		Light olive brown, fine SAND, some Silt, little medium Sand, trace(+) coarse Sand, trace(-) fine Gravel, moist, loose	0.1
† †		1017837	100		As above, wet at ≈ 7.0'	11.0
+8		1017838	100		Grey, fine to medium SAND, little Silt, trace coarse Sand, wet, very loose	1.1
† †	-	1017839	100		Dark yellowish brown, fine to medium SAND, little Silt, trace coarse Sand, wet, loose	1.0
+12		1017840	100		Olive grey, varved CLAY, trace Silt, wet, stiff	0.0
Ŧ	-	1017841	100		As above	0.0
1 					Bottom of boring at 15.0'	
-20	,					
- 24	.					

Comments:

z

Borehole backfilled with bentonite chips upon completion.

Depth: NM

Project: Tie Down
LEA Comm No: 68TR671
Client: Pratt & Whitney
Location: East Hartford, CT
Drilling Contractor: LEA
Drilling Method: Geoprobe
Sampling Method: Macro core
Groundwater Observations:

Hours Hours

Start Date 9/4/96 End Date 9/4/96

Boring ID

SK-SB-68

Logged By: L. Bianchi
Drilling Foreman: J. Sweeton
Drill Rig: Geoprobe 5400
Surface Elevation:

Northing:

Depth:	· · · · · · · · · · · · · · · · · · ·	At:	Hours	Easting:	
	San	ple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	lppn
0	1017814	100		Dark olive grey, fine SAND and SILT, trace medium Sand, moist, loose	0.0
‡	1017815	100		Light brown, fine SAND, little Silt, trace medium Sand, moist, very loose	0.0
+4	1017816	100		As above	1.7
†	1017817	100		Dark olive brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel	0.2
+8	1017818	100		As above, wet	0.4
† †	1017819	100		Dark yellowish brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, loose	0.3
-12	1017820	100		Olive grey, varved CLAY, little Silt, wet, slightly stiff	0.0
Ŧ	1017821	100		As above	0.0
16 				Bottom of boring at 15.0'	
20					
24					
Commer	ats: Boreho	ole backfi	illed with be	entonite chips upon completion.	

Comments:

Borehole backfilled with bentonite chips upon completion.



Printed On: 1/22/1998

Project: Tie Down LEA Comm No: 68TR671 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:**

Hours

Hours

Drilling Method: Sampling Method: Geoprobe Macro core

Groundwater Observations: Depth: NM At:

Depth: At: **Start Date** 9/6/96 **End Date** 9/6/96

Boring ID SK-SB-69

Logged By: L. Bianchi Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 J. Sweeton

Surface Elevation:

Northing: Easting:

8 1	Sample No. 1017883	Recovery (2)	Blows /6"	Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
Depth	No. 1017883		Blows /6"	Moisture, Sorting, Sphericity, Angularity,	(ppm)
8		100		, , , , , , , , , , , , , , , , , , ,	
8 1	1017884	1		Light brown, fine SAND and SILT, trace medium sand, moist, loose, root fragments	16.0
-8	1017884 1017885	100		As above	20.0
12	1017886	100		6": Brown, CLAY, little Silt, moist, very dense; 17": Brown, fine SAND, some Silt, trace medium Sand, moist, loose	1000
12	1017887	100		Olive brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, very moist, loose	110.0
12	1017888	50		Olive brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, loose	79.0
	1017889	50		As above	29.0
‡	1017890	100		Olive grey, varved CLAY, trace Silt, wet, stiff	2.1
	1017891	100		As above	1.3
16				Bottom of boring at 15.0'	
20					
-24					
Comments:				entonite chips upon completion.	



| z

VPSA Project: LEA Comm No: 68TR678 Client: Pratt & Whitney Location: East Hartford, CT Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe

Macro core Groundwater Observations: Hours 물 Depth: NM At:

Start Date 9/6/96 **End Date** 9/6/96

Boring ID

SK-SB-70

L. Bianchi

Logged By: L. Biand Drilling Foreman: Drill Rig: GP 5400 Surface Elevation: J. Sweeton

Northing:

Depth:	NM	At: At:	Hours	Fasting:	
	Sa	mple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
10	1017915	100		Dark brown, fine SAND and SILT, trace medium Sand, moist, loose, root fragments	0.3
‡	1017916	100		10": As above; 13": Olive grey, fine SAND and SILT, trace medium Sand, moist, dense	0.1
+4	1017917	100		17": Light brown, fine SAND, some medium Sand, little Silt, moist, slightly dense; 6": Black, fine to medium SAND, little Silt, moist, dense, organics	7.0
‡	1017918 1017919	100		12": Olive grey, fine SAND, some Silt, trace medium Sand, moist, dense; 13": Olive brown fine to medium SAND, some Silt, trace coarse Sand, very moist, loose	0.8
+8	1017920	100		Yellowish brown, fine to medium SAND, little coarse Sand, trace Silt, very moist, loose	1.2
‡	1017921	100		As above; wet	0.3
+12	1017922	100		As above	0.2
Ŧ	1017923	100		As above	0.0
16				Bottom of boring at 15.0'*	
20					
-24					
Commer	nts: Boreh	ole backfi	illed with b	entonite chips upon completion	<u> </u>

*Olive grey, varved CLAY, trace Silt, wet, stiff at 15.0'

Project: VPSA 68TR678 LEA Comm No: Client: Pratt & Whitney Location: East Hartford, CT LEA **Drilling Contractor:** Drilling Method: Sampling Method: Geoprobe Macro core **Groundwater Observations:**

Depth: NM

At:

Start Date 9/10/96 End Date 9/10/96

Boring ID SK-SB-71

L. Bianchi

Logged By: L. Biand Drilling Foreman: Drill Rig: GP 5400 Surface Elevation: J. Klapheke

Northing:
Fasting:

Depth:	A	At:	Hours	Easting:	
	San	ple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
ļ	1017926	100		Dark brown, fine SAND, with Silt, trace medium Sand, moist, loose, root fragments	1.0
‡ ‡	1017927	100		18": As above; 5": Black, fine SAND, some Silt, moist, dense, strong organic odor	58.
+4	1017928	100		Grey/olive grey fine SAND, little coarse Sand, trace(+) fine Gravel, trace(-) Silt, wet at ≈ 7.0', loose	24.
†	1017929 1017930	100		Brown, fine to medium SAND, little coarse Sand, trace(+) fine Gravel, trace(-) Silt, wet at ≈ 7.0', loose	0.2
+8	1017931	50	-	As above	0.:
‡	1017932	50		As above	0.
12	1017933	100		As above	3.4
† †	1017934	100		10": As above; 2": Olive grey, varved CLAY, trace Silt, wet, dense	0.
+ + 16 + + +				Bottom of boring 15.0'	
20					
24					
Comments	Roseks	le back	lled with h	entonite chips upon completion.	

Project: VPSA LEA Comm No: 68TR678 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** LEA Drilling Method: Geoprobe

Sampling Method: Macr Groundwater Observations: Macro core

Depth: NM

At:

Hours 🚆

tart Date 9/10/96 **End Date** 9/10/96

Boring ID

SK-SB-72

Logged By: L. Biand Drilling Foreman: Drill Rig: GP 5400 Surface Elevation: L. Bianchi

J. Klapheke

Northing:

Depth:		At:	Hours	₹ Easting:	ŀ
· · · · · · · · · · · · · · · · · · ·	Sar	npie Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (え)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
T °	1017935	100		Dark brown, fine SAND, some Silt, trace medium Sand, moist, loose, root fragments	0.1
‡	1017936	100		17": As above; 6": Black fine SAND, some Silt, moist, dense, organic odor	0.2
+4	1017937	100	-	Olive grey fine SAND, little Clay, trace Silt, moist, dense	1.9
† † †	1017938	100		Yellowish brown, fine to medium SAND, some coarse Sand, trace(+) Silt, trace(-) fine Gravel, wet at ≈ 7.0', loose	0.7
+8				No recovery	
				No recovery	
12	1017944	50		Olive grey varved CLAY, trace Silt, wet, dense	0.1
+	1017942	50		As above	0.2
16				Bottom of boring at 15.0'	
20					
-24					
‡					
Comment	s: Boreh	ole backf	illed with b	entonite chips upon completion.	<u></u>

VPSA

Project:

Start Date

Boring ID LEA Comm No: 68TR678 9/10/96 Client: Pratt & Whitney **End Date** SK-SB-73 Location: East Hartford, CT 9/10/96 **Drilling Contractor:** Logged By: L. Bianchi J. Klapheke Drilling Method: Sampling Method: Drilling Foreman: Geoprobe Drill Rig: GP 5400 Macro core Surface Elevation: Groundwater Observations: Depth: NM At: Northing: Depth: At: Easting: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 2.9 1017943 100 Dark brown, fine SAND, with Silt, little medium Sand, moist, loose, root fragments 98.0 100 1017944 18": Yellowish brown, fine SAND, little Silt, trace medium Sand, moist, loose; 5": Black, fine SAND and SILT, moist, dense, organics 1017945 100 0.3 Brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, moist, loose 7.6 1017946 100 As above; wet at ≈ 7.0 '. 100 5.1 1017947 As above 1017948 100 0.1 As above 12 0.3 1017949 100 18": As above; 5": Olive grey, varved CLAY, trace Silt, wet, stiff **Printed** On: 1/22/1998 1017950 100 0.1 As above Bottom of boring at 15.0' 16 20 24 Boring Borehole backfilled with bentonite chips upon completion. Comments: z

				Tage 1 01 1	
	VPSA	TD670		Start Date Boring II)
LEÀ Comr Client: Pa	ratt & Whit	TR678 :ney		Fre Doto	
ocation: Orilling Co	East Harti	LEA		9/10/96 SR-SB-74 Logged By: L. Bianchi	
orilling Mo ampling I Proundwar Pepth: N	Method: ter Observa	ieoprobe Macro co tions: At:	ore Hours	Drilling Foreman: J. Klapheke Drill Rig: GP 5400 Surface Elevation: Northing:	
epth:		At:	Hours	Easting:	
	Sam	nple Informati	on	Sample Description	
levation/ epth	Sample No.	Recovery (X)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
°	1017951	100		Dark brown, fine SAND, with Silt, little medium Sand, moist, loose, root fragments	1.0
‡	1017952	100		Yellowish brown, fine SAND, some Silt, moist, loose	0.4
+4	1017953	100		10": As above; 13": Brown, fine to medium SAND, some coarse Sand, trace Silt, moist, loose	36.0
† †	1017954	100		As above; wet at ≈ 7.0'	10.4
-8				No recovery	
Ī			· · · · · · · · · · · · · · · · · · ·	No recovery	
12	ı.			No recovery	
†				No recovery	
16				Bottom of boring at 15.0'	å
20					
1					
24					
Comments	s: Boreho	ole backfill	ed with b	entonite chips upon completion.	

Project: VPSA t Date Boring ID 1/96 LEA Comm No: 68TR678 Client: Pratt & Whitney End Date **SK-SB-75** Location: East Hartford, CT 9/17/96 Drilling Contractor: Drilling Method: Sampling Method: Logged By: L. Bianchi
Drilling Foreman: J. Klar
Drill Rig: Geoprobe 5400 J. Klapheke Geoprobe Macro core Groundwater Observations:
Depth: NM At: Surface Elevation: Northing:

Depth:		At: At:	Hours Hours	Northing: Easting:	
	San	nple Informat	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
70	1017961	100		2": Asphalt; 6": Subbase; 15": Black/brown, fine SAND and SILT, moist, slightly stiff	125.0
† † † †	1017962	100		10": As above; 7": Black, fine SAND, some Silt, moist, slightly dense, organic odor; 6": Olive brown, fine SAND, little Silt, moist, slightly loose	225.0
+4	1017963	100		6": As above; 17": Greenish grey, fine SAND and SILT, moist, stiff	500.0
‡	1017964	100		Light reddish brown, fine to medium SAND, little Silt, trace coarse Sand, wet at ≈ 7.0', loose	120.0
+8	1017965 1017966	100		As above	225.0
 	1017967	100		Strong brown, fine to medium SAND, little Silt, trace coarse Sand, wet, loose	78.0
+12 +	1017968	50		Olive grey, varved CLAY, little Silt, wet, stiff	1.2
Ī	1017969	50		As above	1.3
† +16	3			Bottom of boring at 15.0'	
+ 20					
+24	4				



Project: VPSA LEA Comm No: 68TR678 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Macro core **Groundwater Observations:**

Depth: NM

Hours

Start Date 9/11/96 **End Date** 9/11/96

Boring ID

SK-SB-76

Logged By: L. Bianchi
Drilling Foreman: J. Klapheke
Drill Rig: Geoprobe 5400
Surface Elevation:
Northing:

Fasting:

Depth:	Į.	At:	Hours		
	San	ople Inform	ation	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1017970	100		2": Asphalt; 10": Subbase; 5": Dark brown/black fine Sand, little Silt, moist, loose; 6": Black, fine SAND and SILT, moist, dense, organic odor	0.9
† † + +	1017971	100		2": As above; 21": Olive brown, fine SAND, some Silt, moist, slightly dense	225.0
+4	1017972	100		7": As above; 16": Light reddish brown, fine to medium SAND, little Silt, trace coarse Sand, moist, loose	22.0
†	1017974	100		As above; wet at ≈ 2.0'	110.0
+8	1017975	100		As above	47.0
‡ †	1017976	100		As above	47.0
12				No recovery	
Ī				No recovery	
16	٠			Bottom of boring at 15.0'	
20					
‡					

VPSA Project: LEA Comm No: 68TR678 Client: Pratt & Whitney Location: East Hartford, CT **Drilling Contractor:** Geoprobe

Drilling Method: Sampling Method: Macro core

Groundwater Observations:
Depth: NM At:

Hours

tart Date 9/11/96 **End Date** 9/11/96

Boring ID SK-SB-77

Logged By: L. Bianchi Drilling Foreman: J. Klar Drill Rig: Geoprobe 5400 J. Klapheke

Surface Elevation:

Northing:

oth:	7	At:	Hours	Easting:	
	San	nple Informa	tion	Sample Description	
ation/ h	Sample No.	Recovery (X)	Blaws /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
P	1017977	100		Dark brown/black fine SAND and SILT, moist, slightly dense, organic odor	22.0
	1017980	100		Strong brown, fine SAND, little Silt, moist, loose	2.0
+4	1017979	100		As above	4.7
<u> </u>	1017980	100		Light reddish brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet at ≈ 7.0', loose	8.3
+8	1017981	50		As above; wet	3.6
‡ -	1017982	50		As above	12.0
12				No recovery	_
				No recovery	
16				Bottom of boring at 15.0'	
20					
-24					
Ŧ					
mments:	Boreho	ol	e backf	e backfilled with be	e backfilled with bentonite chips upon completion.

Project: VPSA LEA Comm No: 68TR678 Client: Pratt & Whitney Location: East Hartford, CT

LEA **Drilling Contractor: Drilling Method:** Geoprobe Sampling Method: Macro core **Groundwater Observations:**

Depth: NM

At:

Hours

tart Date 12/96 **End Date** 9/12/96

Boring ID

SK-SB-78

Logged By: L. Bianchi

Drilling Foreman: J. Klapheke Drill Rig: GP 5400 Surface Elevation:

Northing:

Depth:	F	kt:	Hours	₹ Easting:	
	San	ple Informat	on	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
°	1017989	100		Dark brown, fine to medium SAND, little Silt, trace(-) coarse Sand, moist, loose, root fragments	0.1
† †	1017990 1017991	100		Strong brown, fine to medium SAND, little Silt, trace coarse Sand, moist, loose	0.1
4	1017992	100		As above	0.1
†	1017993	100		Light reddish brown, fine to medium SAND, some Silt, little coarse Sand, trace fine Gravel, wet, loose, (wet at ≈ 7.0')	1.0
+8	1017994	50		As above	2.5
- - - -	1017995	50		Yellowish brown, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, wet, loose	1.2
+12 +	1017996	100		As above	0.4
Ī	1017997	100		As above	0.1
16				Bottom of boring at 15.0'*	
20					
+					
+ 24					

Borehole backfilled with bentonite chips upon completion. *Olive grey, varved CLAY, trace Silt, wet, stiff at 15.0'

Printed On: 6/16/1998

Project: CRYOGENICS

Client: Pratt & Whitney

Drilling Contractor:

LEA Comm No: 68TR678

Location: East Hartford, CT

LEA

Boring ID

SK-SB-80

Logged By: L. Bianchi

epth:		At:	Hours	Northing: Easting: Sample Description	
levation/ epth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm
ļ°	1018009	100		8": Dark brown, fine SAND and SILT, moist, loose, root fragments; 15": Strong brown, fine SAND, with medium Sand, trace Silt, moist, loose	0.0
Ī	1018010	100		As above	0.0
+4	1018011	100		As above	0.0
Ī	1018012	100		Light reddish brown, fine SAND, some medium Sand, little coarse Sand, trace Silt, wet at ≈ 7.0', loose	0.0
+8	1018013	50		As above	1.9
‡ ‡	1018014	50		Dark reddish brown, fine to medium SAND, some Silt, trace coarse Sand, wet, slightly dense	1.0
12	1018015	100		As above	0.0
Ŧ	1018016	100		As above	0.0
16				Bottom of boring at 15.0'*	
20				•	
+ + + + + + + + + + + + + + + + + + + +					

* Olive grey varved CLAY, trace Silt, wet, stiff found at ≈ 15.0'

Printed On: 1/23/1998

Project: Linde Gas LEA Comm No: 68 68TR676 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEADrilling Method: Geopro Sampling Method: Macr Groundwater Observations: Depth: NM At: LEA Geoprobe Macro core

Hours

Start Date 9/19/96 **End Date** 9/19/96

Boring ID

SK-SB-82

Logged By: L. Bianchi
Drilling Foreman: J. Swo
Drill Rig: Geoprobe 5400 J. Sweeton

Surface Elevation:

Northing:

Depth:	NM	At: At:	Hours Hours	Northing:	
 -		Sample Inform	ation	Sample Description	
Elevation/ Depth	Sampl No.	e Recovery	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
	10183	88 100		Weak red, fine SAND, some medium Sand, little Silt, trace(+) coarse Sand, trace(-) fine Gravel, moist, dense	2.5
‡ ‡ ‡	10183	89 100		3": Concrete layer; 20": Red, fine to medium SAND, some coarse Sand, little fine Gravel, trace Silt, moist, dense	3.1
+4	10183 10183	90 91		8": As above; 15": Reddish grey, fine SAND, little Silt, very moist, slightly dense	4.7
‡	10183	92 100		Reddish brown, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, slightly dense	3.5
-8	10183	93 100		Yellowish red, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, slightly dense	4.1
†	10183	94 100		Light brown, fine to medium SAND, trace Silt, wet, loose	3.4
12	10183	95 100		Grey, fine to medium SAND, trace Silt, wet, loose	5.8
. ‡	10183	96 100		Olive grey, varved CLAY, trace Silt, wet, stiff	7.1
16				Bottom of boring at 15.0'	
- 20					
24					
Comme	nte: Ros	ehole back	filled with h	entonite chips upon completion.	

Project: Linde Gas

Stan Date

Boring ID LEA Comm No: 68TR676 /96 Client: Pratt & Whitney ate **SK-SB-83** Location: East Hartford, CT 9/20/96 L. Bianchi **Drilling Contractor:** ogged By: Drilling Foreman: J. Sweeton Drilling Method: Geoprobe Drill Rig: Geoprobe 5400 Sampling Method: Macro core Surface Elevation: Groundwater Observations: Depth: NM At: Hours Northing: Hours Easting: Depth: At: Sample Description Sample Information Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. ecovery (X) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 2.5 1018415 25 Very dusky red, fine to medium SAND, some coarse Sand, little fine Gravel, trace coarse Gravel, moist, very dense, root fragments 1018416 1.9 25 Red, fine to medium SAND, some coarse Sand, little fine gravel, trace coarse Gravel, moist, very dense 1018417 100 3.3 As above 1018418 1018419 100 Reddish grey, medium SAND, some fine Sand, little coarse 3.2 Sand, trace Silt, dense, wet ≈ 7.0' - 8.0' 8 1018420 100 3.2 As above 1018421 100 3.3 Light yellowish brown, fine to medium SAND, little Silt, wet, slightly loose 12 0 No recovery Printed 0 No recovery Bottom of boring at 15.0' * ;; 0 16 1/22/1998 20 24 Boring Borehole backfilled with bentonite chips upon completion. Comments: * Olive grey, varved CLAY, trace Silt, wet, stiff at 15.0' z 68TR676

At:

LEA

Geoprobe Macro core

Project: Linde Gas LEA Comm No: 68

Depth: NM

Client: Pratt & Whitney

Drilling Contractor: LEADrilling Method: Geopro Sampling Method: Macr Groundwater Observations:

Location: East Hartford, CT

Boring ID SK-SB-84

L. Bianchi

Drilling Foreman: J. Swe Drill Rig: Geoprobe 5400 J. Sweeton Surface Elevation:

Northing: Easting:

	F	\t:	Hour	Easting:		
Depth:	Sample Informati					
Elevation/ Depth	Sample No.	Recovery (と)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
P	1018397	50		Dusky red, fine to medium SAND, some coarse Sand, little Silt, trace fine Gravel, moist, dense	3.6	
‡	1018398	50		As above	3.7	
+4	1018399	50	·	As above	3.8	
Ī	1018400	50		Pale red, fine SAND, little Silt, trace medium Sand, very moist, loose	5.1	
- 8	1018401	50		Light yellowish brown, fine SAND, some medium Sand, little Silt, trace coarse Sand, wet, loose	3.8	
 	1018402	50		As above	2.7	
12	1018403	100		Dark grey, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, loose	3.1	
. ‡	1018404	100		Olive grey, varved CLAY, trace Silt, wet, stiff	2.0	
16				Bottom of boring at 15.0'		
20						
† † †						
24						
Comments			40 - 4 *-4 *	entonite chips upon completion.		

Project: Linde Gas Date **Boring ID** 68TR676 9/19/96 End Date LEA Comm No: Client: Pratt & Whitney **SK-SB-85** 9/19/96 Location: East Hartford, CT Logged By: L. Bianchi **Drilling Contractor:** Drilling Method: Geoprobe Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Sampling Method: Macro core Groundwater Observations: Hours Northing: Depth: NM At: Easting: Depth: At: Hours

		Λτ:	Hours	Easting:		
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
·	1018405	50		Dusky red, fine to medium SAND, some coarse Sand, little fine Gravel, trace(+) Silt, trace(-) coarse Gravel, moist, dense	3.1	
Ī	1018406	50		As above	3.7	
+4	1018407	100		13": Yellowish brown, fine SAND, trace Silt, moist, loose; 10": Grey, fine SAND, trace Silt, moist, loose	2.1	
‡	1018408	100		Pale red, fine SAND, some medium Sand, trace Silt, very moist, loose	2.9	
+8	1018409	25		Light brown, fine to medium Sand, some Silt, loose, wet	3.0	
Ī	1018410	25		As above	2.7	
12	1018411	100		Dark grey, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, loose	2.6	
· ‡	1018412	100		As above *	1.7	
				Bottom of boring at 15.0'		
20						
24						
1	1	1 1				

Comments: Borehole backfilled with bentonite chips upon completion.
* Olive grey, varved CLAY, trace Silt, wet, stiff at 15.0'

Tie Down Start Date Project: **Boring ID** LEÀ Comm No: 68TR676 9/23/96 Client: Pratt & Whitney nd Date **SK-SB-86** Location: East Hartford, CT **Drilling Contractor:** Logged By: L. Bianchi Drilling Foreman: **Drilling Method:** Geoprobe J. Sweeton Sampling Method: Drill Rig: Geoprobe 5400 Macro core Groundwater Observations: Surface Elevation: Depth: NM Hour Northing: Easting: At: Hours Depth: Sample Description Sample Information Elevation/ Depth Color, Primary Grain Size, Secondary Grain Sizes, Recovery (%) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1018465 100 0.8 Brown, fine SAND, some Silt, moist, loose, root fragments 1018466 100 0.8 Light yellow, fine SAND, trace Silt, moist, loose 1018467 100 0.9 As above 1018468 100 320.0 Grey, medium to coarse SAND, little fine, trace Silt, wet at \approx 7.0', loose 34.0 1018469 100 As above 1018470 12.0 100 Dark yellow, fine to medium SAND, some Silt, wet, loose 12 1018471 100 5.0 Olive grey, varved CLAY, trace Silt, wet, stiff 2.7 1018472 100 As above Bottom of boring at 15.0' 16 20 Borehole backfilled with bentonite chips upon completion.

Start Date Project: Tie Down **Boring ID** LEA Comm No: 9/23/96 68TR676 Client: Pratt & Whitney End Date SK-SB-87 Location: East Hartford, CT 9/23/96 Logged By: **Drilling Contractor:** LEA L. Bianchi Drilling Foreman: Drilling Method: Geoprobe J. Sweeton Drill Rig: Sampling Method: Geoprobe 5400 Macro core Groundwater Observations: Surface Elevation: Depth: NM Northing: At: At: Hours Easting: Depth: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Blows Sample No. Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1018457 100 0.2 Brown, medium SAND, some fine Sand, little Silt, moist, loose, root fragments 1018458 100 1.2 Light brown, medium SAND, some fine Sand, trace Silt, moist, loose 1018459 100 18.0 As above 1018460 100 1000+ Grey, fine to medium SAND, little coarse, trace Silt, wet at \approx 7.0', loose 8 54.0 100 1018461 As above 1018462 100 16.0 Olive brown, medium SAND, some fine Sand, little coarse Sand, trace Silt, wet, loose 12 7.1 1018463 100 Olive grey, varved CLAY, trace Silt, wet, stiff 1018464 100 1.9 As above Bottom of boring at 15.0' 16 20 24

Comments:

Borehole backfilled with bentonite chips upon completion.

				3 6 7 Cm		
Projec		Tie Down			Start Date Boring	m I
LEA Comm No: 68TR676 Client: Pratt & Whitney					3/23/90	
					End Date SK-SB-	88
Locati					9/23/96	
Drillin	ig Co	ntractor:	LEA		Logged By: L. Bianchi	į
Drilli	ig M	ethod: G	eoprobe		Drilling Foreman: J. Sweeto Drill Rig: Geoprobe 5400	ո լ
Grown	ung 1	Method: ter Observa	Macro	COIO	Surface Elevation:	į
Depth			uons. \t:	Hours	₩ Northing:	
Depth			At:	Hours	Northing:	
		Sam	aple Informa	ation	Sample Description	\neg
			1		Color, Primary Grain Size, Secondary Grain Sizes,	ㅋ !
Elevation Depth	v	Sample	Recovery (%)	Blows /6*	Moisture, Sorting, Sphericity, Angularity,	
		No.		76"	Sedimentary Structures, Density, Cohesiveness	(ppm)
 	0	1018448	100			0.0
1 t	_	1010440	1		Dark brown, medium SAND, some fine, trace Silt, moist, loose root fragments	0.0
l		}	1 1		loose root riaginerits	
1 I		<u> </u>	1	·		
1 +		1018449	100		Light brown, medium SAND, some fine, trace Silt, moist,	0.0
1 +		}	1		very loose	
1 †			_			
l I	4	1018450	100		As above	0.4
1 +		1018451	1 1			1 1
+						i i
1 †		1018452	100		As above, wet at ≈ 7.0'	1.0
l t		1	'''		As above, wet at = 7.0	
l I			·			1 1
1 +	8	1010150	1			
+		1018453	100		As above	20.0
†		Į.		ı		1 1
l I		L		·		
1 1		1018454	100	:	Greyish brown, medium to coarse SAND, some fine Sand,	12.0
		İ			wet, loose	
l †			1 1			
I	12	1018455	100		Olive grey, varved CLAY, trace Silt, wet, stiff	2.1
1		1	1			1 1
l †		1018456	100		As above	1.0
I					As above	
		,			Bottom of boring at 15.0'	
∦ +	16	i			_	
1 +		1	1 1			
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+		1	1		·	
†	20	1	1			
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Com	nents	: Boreho	le backf	illed with be	entonite chips upon completion.	
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Project: Tie Down LEA Comm No: 68TR676 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA Drilling Method: Geoprobe Sampling Method: Macro core

Groundwater Observations:
Depth: NM At:
Depth: At:

Hours

Start Date 9/20/96 **End Date** 9/20/96

Boring ID

SK-SB-89

Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation:

Logged By: L. Bianchi

Northing:

Depth:	At: Hours		Hours	Easting:		
	Sample Information			Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness		
0	1018422	100		Dark brown, fine SAND, with medium Sand, some Silt, moist, loose, root fragment	1.7	
+	1018423	100		Light yellowish brown, fine to medium SAND, little Silt, moist, loose	2.8	
+4	1018424	100		As above	4.1	
+	1018425	100		Light yellowish brown, medium to coarse SAND, with fine Sand, trace Silt, wet, loose	5.7	
 8	1018426	50		Strong brown, fine SAND, with medium Sand, little coarse Sand, trace(+) Silt, wet, loose	4.5	
+	1018427	50		As above	5.6	
12	1018428	100		Olive grey, varved CLAY, trace Silt, wet, stiff	4.1	
†	1018429	100		As above	3.7	
16				Bottom of boring at 15.0'		
20						
+24						
				entonite chips upon completion.		

Project: Tie Down LEA Comm No: 68TR676 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: LEA **Drilling Method:** Geoprobe Sampling Method: Macro core Groundwater Observations:

Depth: NM Depth:

At:

Start Date 9/24/96 **End Date** 9/24/96

Boring ID

SK-SB-90

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northing: Easting:

Depth:	At: Hours					
	San	nple Informa	ormation	Sample Description		
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)	
10	1018475	100		Dark brown, fine SAND, some Silt, moist, loose, root fragments	10.0	
†	1018476	100		Light yellow, fine to medium SAND, little Silt, moist, loose	1.2	
+4	1018477	100		12": As above; 11": Brown, medium SAND, some fine Sand, trace coarse, moist, loose	0.9	
†	1018478 1018479	50		As above	7.4	
- 8	1018480	100		Olive brown, medium to coarse SAND, little fine Sand, trace Silt, wet, loose	44.0	
†	1018481	100		19": As above; 4": Olive grey, varved CLAY, trace Silt, wet, stiff	60.0	
+12	1018482	100		As above	7.3	
†	1018483	100		As above	4.0	
16				Bottom of boring at 15.0'		
20						
-24						
Comments	: Boreho	le backf	illed with be	entonite chips upon completion.	<u> </u>	

Project: Tie Down LEA Comm No: 68TR676 Client: Pratt & Whitney Location: East Hartford, CT

Drilling Contractor: Drilling Method: Sampling Method: LEA Geoprobe Macro core

Groundwater Observations: Depth: NM At:

Depth:

At:

Hours

Start Date 9/20/96 **End Date** 9/20/96

Boring ID

SK-SB-91

Logged By: L. Bianchi
Drilling Foreman: J. Swe
Drill Rig: Geoprobe 5400
Surface Elevation: J. Sweeton

Northin	E:
Easting:	

рерш:	At. Hours			- Lasting.			
	Sau	mple Informa	tion	Sample Description			
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness			
10	1018430	100		Dark brown, fine SAND, with medium Sand, some Silt, moist, loose, root fragments	85.7		
†	1018431	100		Light yellowish brown, fine to medium SAND, little Silt, moist, loose	7.1		
+4	1018432	100		As above	8.4		
†	1018433	100		Light yellowish brown, medium to coarse SAND, with fine Sand, trace Silt, wet at ≈ 7.5', loose	5.2		
8				No recovery			
+	1018435	25		12": No recovery; 11": Olive grey, varved CLAY, trace Silt, wet, stiff	4.8		
12	1018436	100		As above	2.1		
†	1018437	100		As above	1.7		
16				Bottom of boring at 15.0'			
20							
+++++++++++++++++++++++++++++++++++++++							
24							
Comments	: Boreho	ole backfi	iled with be	entonite chips upon completion.	<u></u> _		

Printed On: 1/22/1998

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Project: S	Storage Are	ea 2 VC619		Start Date Boring ID	
Client: Pr	ratt & Whit	ney		End Date	
Location:				10\25/96 SK-SB-93	3
Drilling Co Drilling Me Sampling M Groundwat Depth: NI Depth:	ethod: G Method: ter Observat M A	LEA eoprobe Macro (tions: \t: \t:	Core Hours Hours	Logged By: L. Bianchi Drilling Foreman: J. Sweeton Drill Rig: Geoprobe 5400 Surface Elevation: Northing: Easting:	
	Sam	ple Informa	tion	Sample Description	_
Elevation/ Depth	Sample Na.	Recovery (な)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
+ 0	1020692	91		2": Asphalt; 5": Dark reddish brown, fine to medium SAND, some fine Gravel, little Silt, moist, compacted; 14": Reddish brown, fine to medium SAND, some Silt, little	0.2
1 1	1020693	100		coarse Sand, moist, loose	0.0
+	1020694			6:" As Above; 14": Greenish grey, fine SAND and SILT, stiff, moist; 3": Strong brown, fine SAND, with Silt, some medium Sand, trace coarse Sand, very moist, loose (wet at	
+ 1				\≈ 4.0')	¥
‡]		Bottom of Boring at 4.0'	
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Comments	: Boreho	le backf	illed with b	entonite chips upon completion.	
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GEOLO	TIC DOK	ше г				Page 1 of 1		
	Storage Are				Start Date 10/25/96	Boring II	D	
Client: P	ratt & White East Harti	ney			End Date 10/25/96	SK-SB-9	4	
Drilling Control of Drilling Manual Sampling In Groundwa Depth: National Depth	ethod: G Method: ter Observat M A	LEA eoprobe Macro (tions: At:		至	Logged By: L. Drilling Foreman Drill Rig: Geo Surface Elevation Northing: Easting:	probe 5400	i	
	Sam	ple Informa	tion	Sample Description				
Elevation/ Depth	Sample No.	Recovery	Blows /6"		ary Grain Size, Secondary G e, Sorting, Sphericity, Angu		(pom)	

ъерии.		Al:	тош э	÷ Easting:	
	San	nple Informa	tion	Sample Description	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)
10	1020695	91		2": Asphalt; 5": Strong brown, fine to medium SAND, some Silt, little fine Gravel, moist, compact; 14": Strong brown, fine to medium SAND, some Silt, moist, loose	0.0
‡	1020696	100		As above, wet at ≈ 3.5-4.0'	0.0
+4				Bottom of boring at 4.0'	
-8					
‡					
+12					
+ "				·	
‡					
16					
‡	-				
20					
‡					
 					
+ 24					
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Start Date Project: Storage Area 2 **Boring ID** 68VC619 LEA Comm No: 10/25/96 Client: Pratt & Whitney **End Date** SK-SB-95 Location: East Hartford, CT 10/25/96 Logged By: L. B Drilling Foreman: **Drilling Contractor:** LEA L. Bianchi **Drilling Method:** Geoprobe J. Sweeton Drill Rig: Geopr Surface Elevation: Macro Core Geoprobe 5400 Sampling Method: Groundwater Observations: Depth: NM Hours Northing: At: At: Hours Easting: Depth: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. ecaver) (۲) Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 0.0 1020697 91 2": Asphalt; 5": Strong brown, fine to medium SAND, some Silt, little fine Gravel, moist, compact; 14": Strong brown, fine to medium SAND, some Silt, little coarse Sand, moist, loose 1020698 100 0.0 As above, wet at 3.5'-4.0' Bottom of boring at 4.0' 12 16 20 24 Borehole backfilled with bentonite chips upon completion. Comments:



Project: Storage Area 2 Start Date **Boring ID** LEA Comm No: 68VC619 Client: Pratt & Whitney 10/25/96 **End Date SK-SB-96** 10/25/96 Location: East Hartford, CT **Drilling Contractor:** L. Bianchi LEA Logged By: Drilling Foreman: J. Swo Drill Rig: Geoprobe 5400 Surface Elevation: Drilling Method: Geopro Sampling Method: Maci Groundwater Observations: Geoprobe J. Sweeton **Macro Core** Depth: NM At: Hours Northing:

Depth:	At: Hours					
	San	nple Informa	ation	Sample Description	I	
Elevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness		
0	1020699	100		2": Asphalt; 5": Strong brown, fine to medium SAND, some Silt, little fine Gravel, moist, compact; 16": Strong brown, fine to medium SAND, some Silt, little coarse Sand,	0.2	
Į.	1020700	100		moist, loose	0.0	
‡				As above, wet at ≈ 3.5'-4.0'		
†⁴				Bottom of boring at 4.0'		
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Project: Storage Area 2
LEA Comm No: 68VC619
Client: Pratt & Whitney Location: East Hartford, CT LEA **Drilling Contractor:** Drilling Method: Sampling Method: Geoprobe Macro Core

Groundwater Observations: Depth: NM At: Hours Depth:

At: Hours Start Date 10/25/96 End Date 10/25/96

Boring ID

SK-SB-97

L. Bianchi

Logged By: L. Bi Drilling Foreman: Drill Rig: Geopre Surface Elevation: J. Sweeton Geoprobe 5400

Northing: Easting:

Deptn:		<i>X</i> 1:	Hours	₹ ▼ Lasung:			
	San	nple Inform					
Sevation/ Depth	Sample No.	Recovery (%)	Blows /6"	Color, Primary Grain Size, Secondary Grain Sizes, Moisture, Sorting, Sphericity, Angularity, Sedimentary Structures, Density, Cohesiveness	(ppm)		
10	1020701	48		2": Asphalt; 4": Dark reddish brown, fine to medium SAND, some fine Gravel, little Silt, moist, compact; 5": Greenish grey, fine SAND and SILT, moist, stiff	0.0		
+	1020702	48		5" As Above; 6": Strong brown, fine to medium SAND, some Silt, little coarse Sand, trace fine Gravel, wet, loose	0.1		
+4				Bottom of boring at 4.0'			
†							
8							
†							
12							
‡							
16							
‡							
20							
+							
+24							
+							
Comments	: Boreho	le back	filled with be	entonite chips upon completion.			

GEOLO	GIC BOR	RING L	OG			Page 1 of 1	
LEA Com Client: F	Storage Ar m No: 68 Pratt & Whit	VC619 tney		ON	Start Date 10/25/96 End Date	Boring ID	
Drilling C Drilling M Sampling	lethod: G Method: ater Observa	LEA Seoprobe Macro C			10/25/96 Logged By: L. E Drilling Foreman: Drill Rig: Geop Surface Elevation Northing: Easting:	robe 5400	8
Elevation/ Depth	Sample No.	Recovery	Blows /6"	Moisture, Sc	Sample Description Grain Size, Secondary Graing, Sphericity, Angul tructures, Density, Cohe	arity,	(ppm)
0	1020703	48		2": Asphalt; 5": Dark some fine Gravel, little	reddish brown, fine to e Silt, moist, compact; m SAND, little Silt, trac	medium SAND, 4": Yellowish	0.0
t	1020704	48			e SAND and SILT, moi	st, stiff; 4":	0.2

Brown, fine SAND, some Silt, trace medium Sand, wet, Bottom of boring at 4.0' 16 Borehole backfilled with bentonite chips upon completion. Comments:



Start Date Tank Trailer Storage Area Project: **Boring ID** 68VC610 LEA Comm No: 11/12/96 Client: Pratt & Whitney **End Date SA-SB-99** Location: East Hartford, CT 11/12/96 LEA Logged By: L. Bianchi **Drilling Contractor:** Drilling Foreman: Drilling Method: Hand Auger J. Sweeton Drill Rig: Sampling Method: **Bucket Auger** Hand Auger Surface Elevation: Groundwater Observations: Depth: NM Hour Northing: Hours **Easting:** Depth: At: Sample Information Sample Description Color, Primary Grain Size, Secondary Grain Sizes, Elevation/ Depth Sample No. Blows Moisture, Sorting, Sphericity, Angularity, (ppm) Sedimentary Structures, Density, Cohesiveness 1021134 100 0.0 2": Forest cover; 10": Black, fine SAND, little Silt, organic material, loose, moist, root fragments 1021135 100 0.0 2": As Above; 10": Light greenish grey, fine SAND and SILT, moist, loose, mottled Bottom of Boring at 2.0' 12 Printed On: 6/17/1998 16 20 24 Boring Comments: Auger hole backfilled upon completion. × o: